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# LAPIDARY JOURNAL JEWELRY ARTIST

DECEMBER 2015

Roger Halas's  
Mystical  
Moonstone Ring  
PAGE 30

MAKE  
THIS

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AS SEEN IN COOL TOOLS  
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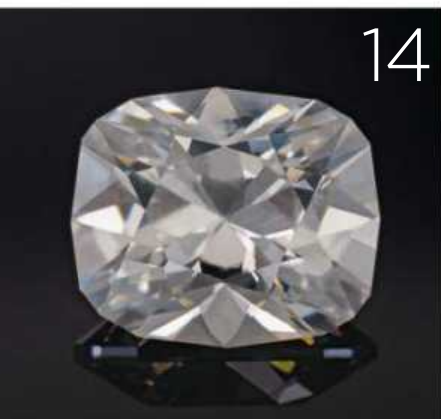




# LAPIDARY JOURNAL<sup>®</sup> JEWELRY ARTIST



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## ABOUT OUR COVER:

Roger Halas's *Mystical Moonstone Ring*, page 30; inset, Beatriz Fortes's *Score and Fold Metal Star*, page 22.

PHOTOS: JIM LAWSON



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# Stop, I Say, Stop!



**MAYBE IT WAS JUST LATE** in the day, but as I was reviewing Betsy Lehnendorff's Picture Perfect Heads or Tails Pendant (page 48) and read her instructions to "brush on solder stop at the base of each pin where it joins the bezel," I suddenly pictured a *Fantasia*-like scene, with runaway solder pouring down by the bucketful while an overwhelmed Mickey Mouse/Sorcerer's Apprentice of a jewelry maker frantically yells "Stop, Solder!

Stop!" to no avail.

Solder stop is one of those coatings designed to help prevent solder from flowing where or when you don't want it to, such as in an already closed join when you're trying to solder another join closed. Which got me thinking about what else it might be nice to be able to put an end to at will. So here's my Top 10 Holiday List of products that I would love to see on the market, or better yet get to market myself, ASAP:

- Garden Eating Deer Stop
- Courtesy Call Telephone Solicitation Stop
- Repeat Spousal Argument Stop
- World Hunger Stop
- Donald Trump Stop
- 4-Year-Long Presidential Campaign Stop
- Useless Software Help Stop
- Software Update Just When I Figure Out the Last One Stop
- Cracking Knee Stop
- Drivers Who Only Use Turn Signals After They've Started the Turn Stop
- Top 10 List Stop . . . oops, that's 11, so yes, I'll stop.

Before I finish entirely, though, let me just ask each of you to stop for a moment at this busy time of year, accept our thanks for your continued support, and wish you the very best. May each of you and yours have a happy holiday and a healthy and prosperous new year, and may all your solder joins stay put no matter how much fire you bring near them.

*Merle White*  
Merle.White@fwcommunity.com

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A collection of jewelry is displayed on a dark, textured background with small white stars. The items include several necklaces made of large, overlapping circles, a bracelet made of small, overlapping circles, and a pair of earrings with a small circle and a teardrop. The text "...available in brass & sterling silver" is written in a cursive font. The text "CALL FOR CATALOG" is written in a bold, sans-serif font. The logo "SN SSC" is in the bottom left corner.

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# YOUR TURN

reader comments & sketches

## NEXT TIME:



Roger Halas's *Mystical Moonstone Ring*, page 30.

Riff on a design feature of this piece such as color, texture, form, value, line, space, repetition, balance, contrast, unity, or variety for your sketch.



Sketch a setting for this antique cushion cut cubic zirconia, cut by Jim Perkins, page 14.

## DEADLINES:

### DECEMBER 31, 2015

Email digital scans at 300 DPI or send photocopies of no more than three sketches per challenge, indicating the design factor that is your starting point. Sketches will not be returned.

## WRITE TO US ANYTIME:

What do you think about what you've seen and read in *Lapidary Journal Jewelry Artist*?

## SEND SKETCHES & LETTERS

for possible print or online publication to: Karla Rosenbusch@fwcommunity.com; or Lapidary Journal Jewelry Artist, 88 Glocker Way, #299, Pottstown, PA 19465.

Include your name, city, and state, and indicate "Your Turn" on the subject line or envelope.

# > DESIGN CHALLENGES

## YOUR COVER RIFFS:

Designs based on Beatriz Fortes's *Hammered Silver Rose Pendant*, August, 2015.



Jill Morrison  
Altadena, California

Shevvy Baker  
Louisville, Kentucky

## YOUR SETTINGS:

Designs based on a pinolith cabochon, August, 2015.



Shevvy Baker  
Louisville, Kentucky



Robin Adams  
White Rock, British Columbia



Thomas Wickline  
Tacoma, Washington

# > LETTERS

## Re: "Colorful Enamel Dome Ring," September/October 2015

I was really pleased to see the red enameled ring project in the September/October issue because it was similar in many ways to a project I'm doing now. I had questions about bezel setting an enamel piece and the soldering, but then I was disappointed when I read through it. It didn't say anything about whether you needed to use hard, medium, or easy solder for each stage or whether it's okay to use all hard or what. Surely this is exactly the sort of thing that other people need to know too.

Amber Ravenscroft  
Derbyshire, U.K.

**Kirsten Denbow responds:** Thanks for asking about solder.

As with most soldering projects you will want to begin with hard and work your way to easy. For example, solder the bezel together with hard then solder it down with medium and finish by attaching the ring shank with easy. You also asked about using all hard. It is possible to solder the entire piece with hard. You will need to be very precise and be able to control your solder flow carefully. It just takes a little higher skill level. I'd recommend going from hard to easy for the beginner/intermediate skill set and using all hard for the intermediate/advanced metalsmith. **[Editor's note: For more on soldering check out *How to Solder Jewelry*, a special issue of Lapidary Journal Jewelry Artist available now at [www.interweavestore.com](http://www.interweavestore.com).]**





A background image showing various jewelry-making tools and materials. On the left, a wooden mallet with a metal head is visible. In the center, there are several pieces of jewelry: a large pearl, a smaller pearl on a chain, a ring with a large orange gemstone, and a ring with a diamond. On the right, there are several pens or pencils. In the bottom right, there are some pieces of metal or stone, including a square piece with a diamond and a triangular piece.

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# THEIR TURN

*a gallery of this issue's contributors*

## NIKKI COUPPEE'S Emerald Drops

Sterling silver, fine silver, Plexiglas

"Artisan Jewelers Who Love Plastic"  
Page 54



PHOTO: COURTESY  
NIKKI COUPPEE

## LIN STANIONIS'S Penitence Brooch

Urethane resin, 18K gold findings

"Artisan Jewelers Who Love Plastic"  
Page 54



PHOTO: JON BLUMB

## BEATRIZ FORTES'S Braided Bracelet

Sterling silver, copper

"Score and Fold Metal Star"  
Page 22



PHOTO: BEATRIZ FORTES



**BETSY LEHNDORFF'S  
Flip Pendant**

Lapis, turquoise, sterling silver, pearls

"Picture Perfect Heads or  
Tails Pendant"  
Page 48

PHOTO: BETSY LEHNDORFF



**ROGER HALAS'S  
Dawn of the Trilobite  
Pendant**

Trilobite, sterling silver,  
faceted citrine

"Mystical  
Moonstone Ring"  
Page 30

PHOTO: ROGER HALAS



PHOTO: KATE CASE

**KATE CASE'S  
Pendant**

Sterling silver, 18K gold, pearl

"Mixed Metal Pebble Pendant"  
Page 38

PHOTO: COURTESY ARTHUR HASH



**ARTHUR HASH'S  
Web Series Cuff**

ABS Plastic

"Artisan Jewelers Who  
Love Plastic"  
Page 54





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By Cathleen McCarthy

# Get Ready for Proposal Season

*same-sex couples enter the marriage jewelry market nation-wide*

Holiday season is upon us. Gift jewelry is at peak demand and so are engagement rings. If you make rings, you probably see a sales spike this time of year. Online surveys show December is the most popular month to pop the question. Christmas Eve is the most popular day to propose, followed by Valentine's Day and Christmas Day.

With the recent Supreme Court ruling legalizing gay marriage, this could be a banner year for wedding and engagement rings. Many same-sex couples have already been in committed relationships for decades, and it's a jubilant time for the LGBT community, whether or not a couple decides to marry now.

Quite a few same-sex marriage proposals happened as laws were passed in individual states. Many more took place in the glee of Gay Pride weekend, following the June 27 SCOTUS (Supreme Court of the United States) ruling.

But couples in the LGBT (lesbian, gay, bisexual, and transgender) community aren't so different from other couples in love. Most prefer to contemplate such a major life change, and they want their proposal to be inti-

mate, personal, and meaningful. Many wait for a significant anniversary or an exotic getaway to pop the question.

But others will propose on their favorite holiday, which means they're looking for rings right now. If you'd like to put yours on their radar, here are a few things to keep in mind.

## Gay-friendly marketing, not rings

You don't have to stamp a triangle into the shank or mount stones in the form of a rainbow. Don't assume a gay couple wants their betrothal rings to serve as a gay pride statement. More likely, they want their rings to reflect their commitment and personal style, just like anyone else.

How to make your marketing gay-friendly? That can be as simple as supporting landmark moments such as the legalization on your site or social media, and taking part in events like Gay Pride celebrations. Consider taking it a step further and approaching LGBT groups with trunk shows or

special educational events.

This is exactly what Rony Tennenbaum — a NYC designer who openly markets his rings to same-sex couples — does. When a store takes on Tennenbaum's jewelry, he offers to train staff to work with gay customers and gives evening lectures to the community, explaining how the tradition of gay marriage is evolving.

Among other things, he recommends full disclosure. "I don't want a straight couple to buy my rings, then discover on my website that the store sold them 'gay jewelry,'" he explains. "My jewelry should be presented as a line by a gay designer who's embraced the gay community as a starting point — but so did Bette Midler and Barbra Streisand. My rings aren't gay, they're designed for everyone."

Given the proper context, many straight couples appreciate the association with a progressive brand.

## Learn the new protocol

It helps, when approached by a gay



ILLUSTRATION: STEPHAN PARK



couple looking for rings, to understand what they might be looking for. How does the ring exchange work? Does one propose to the other? Who gets an engagement ring: one or both or neither?

That protocol is still in flux, according to Tennenbaum, who began catering to this market soon after the first state, Massachusetts, legalized same-sex marriage. The LGBT community hasn't had much time to develop betrothal traditions. They've been too busy fighting to win the right to have them.

"As the state laws were passed," Tennenbaum says, "I got more and more couples coming in saying, 'Oh my gosh, we're so excited! Our state is now allowing marriage equality. Uh . . . what do we do now? Do we get engaged?'"



According to Rachel Meyering, owner of Sparkles, a fine jewelry store that opened in Chicago just as gay marriage laws were passed there two years ago, one man usually proposes to the other, then both get engagement rings that end up doubling as wedding bands. Lesbians tend to exchange engagement rings, she says, and then come back for wedding bands.

## MORE JEWELRY BUSINESS TIPS FROM CATHLEEN

Get more of Cathleen's do's and don'ts for growing your jewelry business in the compilation of her Net Profits columns, "How to Sell Jewelry Online: Collected Net Profits, 2012-2013."



Available at [www.bit.ly/CollectedNetProfits](http://www.bit.ly/CollectedNetProfits)

Tennenbaum has seen the opposite in the store he ran in Soho for three years and as a designer selling to this market for the past seven. "I have more men buying two rings for each partner and women less," he says. "I've noticed women tend to marry quicker, eager to build their nest. They're also more cautious with their money. A male couple are more than happy to spend on diamond rings and then another set of rings to go with it."

In other words, there are no rules. Your best bet is to make these customers feel comfortable and then take the time to listen to what they want. "Don't assume gay couples want some particular thing, some particular style," Meyering says.

## Ring styles

So what about style: what kind of rings are LGBT customers looking for?

At least two recently married lesbian couples I know chose gowns and

rings that weren't much different from straight brides'. In one case, both wore wedding dresses, one a little more feminine and traditional, the other more tailored.

These were women who'd reached middle age and raised a family together by the time they were allowed to wed. They knew their style, and it didn't have much to do with sexual preference. They had fought their battle and won. They weren't trying to make a political statement on their wedding day. Just wearing those wedding rings is statement enough for them.

But Tennenbaum says plenty of his lesbian customers *are* looking for something a little off-grid. This is a progressive crowd, after all. "Most don't want the rings their mother and father wore," Tennenbaum says. "They don't want that Tiffany look."

Both Meyering and Tennenbaum have found many LGBT couples want rings that relate visually to their partners' rings, but don't necessarily match. Sometimes this means a variation in metal finish, stone color, or size to reflect individual taste.

When dealing with a gay couple, listen to what they both like, then suggest ways to customize your existing rings to both tie them together and differentiate them as individuals.

## find more online

*"Making wedding rings for same-sex couples"*



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# Megan's Wedding Stone



*A very special cut for a very special occasion*

BY JIM PERKINS

PHOTO: JIM LAWSON

## WEDDINGS ARE A BIG EVENT IN OUR FAMILY,

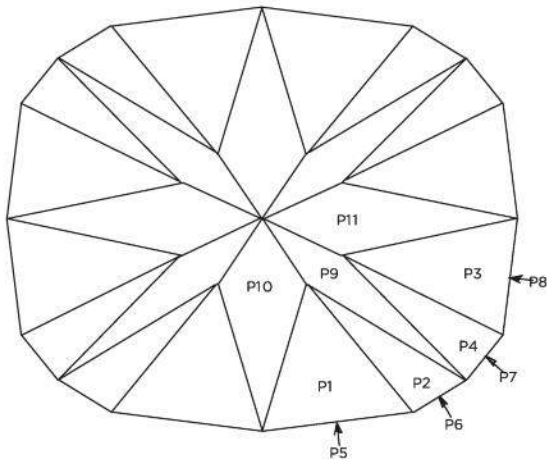
and when my nephew Derek asked Megan to marry him, I volunteered to cut stones for bridesmaid necklaces. After showing her some design ideas, I created some square cushions and other designs and took a catalog of settings with me. She asked if I could make a design for a 10X12 millimeter stone, so I arbitrarily stretched one of the designs in Gem Cad and ended up with this. Since the girls' dresses were all different colors, I suggested a colorless stone. Megan decided on cubic zirconia. I also made custom pens that Derek picked out for the groomsmen and then set up an assembly line to cut all six stones. I found that they cut easily, and although I only cut so many of the same design for family weddings, I truly enjoyed doing it for Derek and Megan.

I think any lapidary can work with brides and their families for gifts that are truly unique.

**JIM PERKINS** began to cut stone at age 12 in his father's rock shop. He studied art and design at Cuyahoga Valley Art Center and at the University of Akron and faceting at William Holland School of Lapidary Arts. He has published several books, including *Learning to Facet in the 21st Century Using the Fac-ette* and *Learning to Facet in the 21st Century Using the Facetron*.

Contact him at [jimperkins@zoominternet.net](mailto:jimperkins@zoominternet.net).



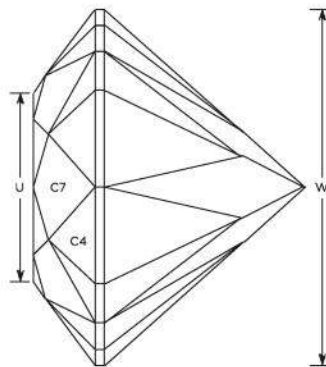
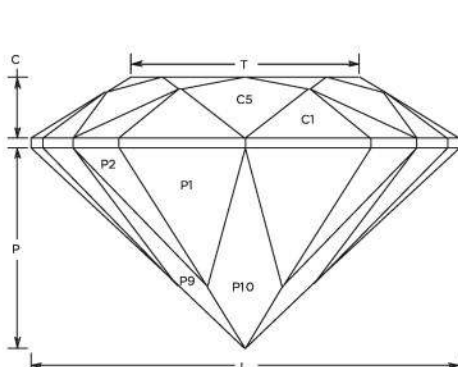
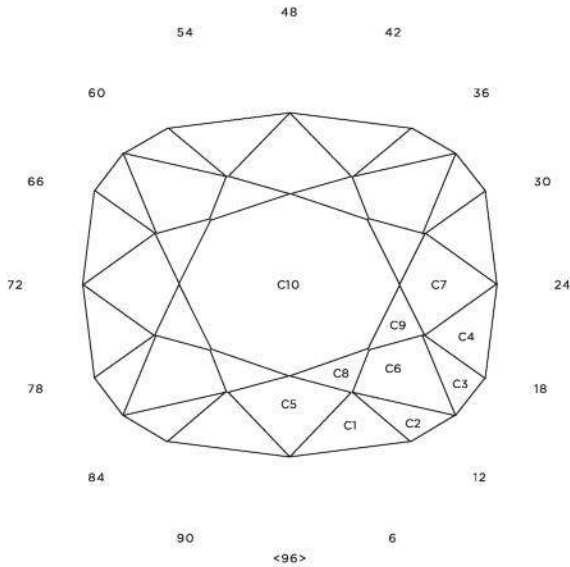


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P2	45.45°	08-40-56-88	Cut to center point
P3	44.23°	22-26-70-74	TCP
P4	43.21°	14-34-62-82	NEW TCP
P5	90.00°	02-46-50-94	SET SIZE.
P6	90.00°	08-40-56-88	MP@ P1 & P3.
P7	90.00°	14-34-62-82	MP@ P2, P5.
P8	90.00°	22-26-70-74	MP@ P4 & P7.
P9	43.00°	11-37-59-85	PCP; GMP.
P10	48.36°	96-48	MP@ PCP;GMP.
P11	43.21°	24-72	PCP; GMP

## CROWN

FACET	ANGLE	INDEX	COMMENTS
C1	39.97°	02-46-50-94	SET GIRDLE HEIGHT.
C2	33.24°	08-40-56-88	SET GIRDLE HEIGHT.
C3	31.07°	14-34-62-82	SET GIRDLE HEIGHT
C4	34.22°	22-26-70-74	SET GIRDLE HEIGHT.
C5	36.00°	96-48	GMP
C6	28.81°	11-37-59-85	GMP
C7	31.46°	24-72	GMP
C8	18.37°	05-43-53-91	MP@ C1 & C2.
C9	18.27°	17-31-65-79	MP@ C3 & C4
C10	0.00°	Table	MP@ C5 - C8; C6- C8 & C9; C7-C9.



## TECHNICAL NOTES

Angles for R.I. = 2.160

57 + 16 girdles = 73 facets

2-fold, mirror-image symmetry

96 index

$L/W = 1.200$   $T/W = 0.641$   $U/W = 0.529$

$P/W = 0.562$   $C/W = 0.171$

$Vol./W^3 = 0.325$

# COOL TOOLS & HIP TIPS

BY HELEN I. DRIGGS | PRODUCT PHOTOS: JIM LAWSON

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*Notable new equipment and supplies*

# 25 Days of Hand Tools

HAND TOOLS ARE ENDURING OBJECTS OF DUTY. I mean beauty. The history and mystery of the jeweler's art lies not only in our precious materials but also in our specialized tools. Fascinating to look at, learn about, and use, I mean really — who doesn't love hand tools? I'm ever-watchful for and genetically predisposed to want them and can't pass by a sturdy set of pliers or an old hammer without picking it up and feeling the steel in my hand. Around this time of year, my family asks what I want for under the tree, so I made a list: tool steel beats a fuzzy sweater any time.

## 1. Fixed Saw Frame

I discovered this frame by accident; it's funny how you find love when you aren't searching for it. German-made and CAM operated: an essential time-saver and a must for complex fretwork. Those spring-loaded jaws make it a speedy snap to detach and reattach a blade; tighten it by springing the frame. Refine the unfinished handle to fit your own mitt — just like the pros. Get. One. Now.  
**MORE AT [WWW.ALLCRAFTUSA.COM](http://WWW.ALLCRAFTUSA.COM)**

## 2. EuroTool Pin Vise

This model trumps all my others because of the sliding (not turned, screwed or otherwise time-consuming) lock — a one-hand operation, meaning you can hold on to something in one hand and set the vise with the other, which suits me just fine on a busy day.  
**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 3. Straight Small Burnisher

In my current quest for perfecting my finishing technique, I've discovered that

burnished edges are most excellent. This hard steel tool gets into the tightest spots and gets your ratty edges out of trouble in a flash.

**MORE AT [WWW.ALLCRAFTUSA.COM](http://WWW.ALLCRAFTUSA.COM)**

## 4. Mini Triangle and Hollow Scrapers (plus handle)

Again, my current finishing focus has caused me to investigate tried and true heritage tools made for that purpose. Scrapers allow you to prep nasty edges by removing saw and file marks before burnishing. Want that delicious glint on all your metal edges? Old ways are good ways.

**MORE AT [WWW.ALLCRAFTUSA.COM](http://WWW.ALLCRAFTUSA.COM)**

## 5. Hardwood Bullet Head Mallet No. 30

I adore this Japanese hammer for creating domed and dapped forms and synclastic curves, and as an impromptu forming mandrel for circle bezels. Again, finish the handle to your own specifications.

**MORE AT [WWW.ALLCRAFTUSA.COM](http://WWW.ALLCRAFTUSA.COM)**



8



9



10



As seen in  
COOL TOOLS

## ADVANCE COLD CONNECTIONS COLLECTION

- Eurotool's Small Tap & Diet Set
- Riveting & Cold Connections (video)
- Riveting & More with a Drill Gauge (video)
- Metal Style: 20 Jewelry Designs with Cold Join Techniques (ebook)
- And more!

Available at [www.interweavestore.com](http://www.interweavestore.com).

## 6. Nechamkin Custom Pistol Grip Chasing Hammer

This is truly the chasing hammer of my dreams. Each one of these American-made beauties is shaped, sanded, finished, and mounted by hand, and features a comfortable ergonomic grip that is well balanced, the perfect weight for a long stint at the bench and an utter joy to own and use. Go on — treat yourself.

**MORE AT [WWW.NECHAMKIN.COM](http://WWW.NECHAMKIN.COM)**

## 7. Tiny Steel Mallet on Bamboo Handle

Another awesome hammer from Asia procured by Allcraft Tools, this sweet little Japanese mallet is the bees' knees for flattening rivet heads into perfect circles — just make sure you sand and finish the faces of that mallet first.

**MORE AT [WWW.ALLCRAFTUSA.COM](http://WWW.ALLCRAFTUSA.COM)**

## 8. Siena 3mm Uppercase Metal Stamps

As I am a former graphic designer, new metal stamping fonts are a source of delight for me. This all-purpose, legible alphabet is fantastic for all of your stamping and personalization needs.

**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 9. 12-Piece Punctuation Stamp Set in Stand

Typically, I am punctuation-averse, but these make me want to study grammar again. Not! They are also fun design stamps for patterns, which is why I love them. **MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 10. Thumb-Safe Stamp Holder

Great for getting a clear line of sight, this holder securely grips the shaft of any metal stamp and also lets you get your holding hand out of the line of fire.

**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 11. Elite Design 5mm Flower Stamp

I love flowers. I love radial symmetry. This sweet stamp gives me both.

**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 12. Elite Design Jumbo 10mm Triple Spiral Stamp

As far as I am concerned, this baby is a border pattern waiting to happen. So please: move out of my work area now and excuse me a minute while I grab some copper bracelet blanks, a steel block, and a hammer. Patina, anyone?

**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 13. Nylon Dapping Punches Set

I'm always looking for sturdy, lightweight, and travel-ready tools for my classroom, and this set fits those criteria. Plus, they won't mar textured or delicate surfaces, either. Love. It.

**MORE AT [WWW.JEWELRYTOOLS.COM](http://WWW.JEWELRYTOOLS.COM)**

## 14. Jeweler's Tap and Die Set

Tapping screw threads in a drilled hole is a snap with this petite set. You can make a matching threaded rod with the corresponding die, too. Go slow, be patient, and trust me; your cold



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13



14



Go to your sink right now. Throw out that nasty excuse for a brass brush — you know, that old wood one: slippery, warped, discolored, and losing bristles.

connections will never be the same.  
**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 15. Zig Zag Bending Pliers

O.M.G. What can I say? There is nothing like a zig-zag to make a metalworker happy. Mini-corrugation can be had with a hand tool now. Woot!

**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 16. Wolf Groovy Chain Nose Pliers

Kate Wolf's a tool designer who makes great "Why didn't I think of that?" tools. These pliers are a chain-maker's dream and allow you to pick up and hold minuscule jump rings or other looped findings with precision — they'll stay put in the curved groove without marring.

**MORE AT [WWW.EUROTOOL.COM](http://WWW.EUROTOOL.COM)**

## 17. Nylon Handle German Brass Brush

Go to your sink right now. Throw out that nasty excuse for a brass brush — you know, that old wood one: slippery, warped, discolored, and losing bristles. Get this one instead: sleek, sturdy, German-made, and non-rotting. Yes?

**MORE AT [WWW.ALLCRAFTUSA.COM](http://WWW.ALLCRAFTUSA.COM)**

## 18. Brass Guillotine with Wood Inserts

Sit down now and steady yourself. This deceptively simple tool changed my life forever. Why? I was once in constant search for just the right way to hold a teeny little sliver of metal or wire

### LEARN MORE FROM HELEN DRIGGS

- **Metalsmith Essentials: Basic Fabrication (DVD)**  
[www.bitly.com/DriggsBasicFabri](http://www.bitly.com/DriggsBasicFabri)
- **The Jewelry Maker's Field Guide (Book)**  
[www.bitly.com/DriggsBuyMyBook](http://www.bitly.com/DriggsBuyMyBook)



#### HAVE A TOOL, MODIFICATION, OR BENCH TRICK TO SHARE?

🔍 Email us at [Helen.Driggs@fwcommunity.com](mailto:Helen.Driggs@fwcommunity.com), subject line "Cool Tools." Please include your complete contact information with all submissions.





Please. When you draw down expensive, high-quality precious metal wire, don't cheap out and use an inexpensive import drawplate. Just don't. You owe it to your metal to use a high quality tool.



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to file, saw, sand, drill, or otherwise reconfigure. No more. See, this little tool is a clamp. Open the jaws using the screws, insert the teeny metal you want to work on, tighten them, and get fabricating. Be still my heart. BTW, the guillotine comes in two versions. Brass and . . . wait for it:



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## 19. Steel Guillotine with Wood Inserts

Same tool, stronger metal. So, you want one, right? This gorgeous and ever-useful duo is made by those clever machinist guys at Knew Concepts I talked to you about in the last issue. **MORE AT [WWW.KNEWCONCEPTS.COM](http://WWW.KNEWCONCEPTS.COM)**

## 21. Tungsten Carbide Drawplate

Please. When you draw down expensive, high-quality precious metal wire, don't cheap out and use an inexpensive import drawplate. Just don't. You owe it to your metal to use a high-quality tool like this one, which will give you perfect round results, is made in the USA, and will last forever. You won't find a better one anywhere. **MORE AT [WWW.ALLCRAFTUSA.COM](http://WWW.ALLCRAFTUSA.COM)**

## 22. Now That's a Pliers! Starter Set

Compatible with the Now That's a Jig! line by Brenda Schweder, the parallel-jointed pliers starter kit includes the tool and an assortment of threaded round pegs. Those plier tips feature a jig slot on one tip and a removable 3mm peg on the other. Loops, rings, round bezels, you name it, the mandrel and peg system is ideal for use with any of the shaped or round pegs or pucks in the line. **MORE AT [WWW.BRENDASCHWEDER.COM](http://WWW.BRENDASCHWEDER.COM)**

## 23. Ceramic Honeycomb Solder Plates with Pegs

So, remember I told you I am always looking for ways to hold teeny stuff

## 20. Eastern Repoussé Punches

Victoria Lansford is another maker who also makes tools. Her chasing punches are slightly shorter than your average manufactured chasing punch, and feature highly polished hard steel heads and a delicious range of useful shapes for deeply chased designs. I love the large and small liners. And I just happen to have a new chasing hammer now, too. **MORE AT [WWW.VICTORIALANSFORD.COM](http://WWW.VICTORIALANSFORD.COM)**



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while I fabricate? Well, the same situation applies to soldering, too. This nice little block has repositionable pegs to help you do just that. Sweet!

**MORE AT [WWW.JEWELRYTOOLS.COM](http://WWW.JEWELRYTOOLS.COM)**

## 24. ImpressArt Hole Punching Pliers

Normally, I drill. But lately, I have been using very thin recycled metal in my work, and these pliers make short work of punching long lines of holes for decorative or other purposes in metal up to 18 ga. There is a protective depth gauge on them too, so you won't ding delicate surfaces.

**MORE AT [WWW.IMPRESSART.COM](http://WWW.IMPRESSART.COM)**

## 25. ImpressArt Nylon Jaw Bracelet Bending Pliers

So, after you use metal stamps or other textures on your copper bracelet blanks, go ahead and form a cuff using these pliers — instead of a mandrel and mallet. Those nylon jaws won't mess up your carefully stamped design. And, can I say something? I love orange!

**MORE AT [WWW.IMPRESSART.COM](http://WWW.IMPRESSART.COM)**



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COMING  
NEXT TIME...  
100<sup>th</sup> Installment  
of Cool Tools  
& Hip Tips

### HELEN DRIGGS

is Senior Editor for *Lapidary Journal* Jewelry Artist and an experienced metalsmith and teacher. Follow her blog: [materialsmithing.wordpress.com](http://materialsmithing.wordpress.com); Instagram feed: [hdriggs\\_fabricationista](https://www.instagram.com/hdriggs_fabricationista); and Twitter feed: [@fabricationista](https://twitter.com/fabricationista) for more jewelry-related fun.

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JEWELRY PROJECT

SKILLS

- Basic sawing
- Drilling a simple hole
- Finishing a piece

TIME IT TOOK

About 30 minutes



AN  
EASIER  
WAY

See page 25



# Score *and* Fold Metal Star

*Create an attractive symbol of the holiday season to give or wear*

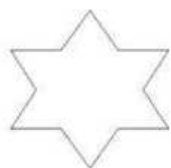
BY BEATRIZ FORTES



# THESE SIMPLE BUT PRETTY STARS

are simple to make: saw, score with a separating disk, and bend. No soldering necessary! Add a bit of ribbon and they are ready to hang on a window, tree, or as a finishing touch on a gift. Add a finding and you have seasonal jewelry that's perfect all year.

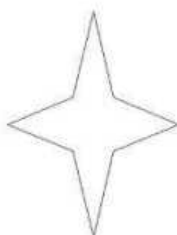
Of course, the basic star is just a starting point: you can customize with texture, patina, stones, beads, or drops. There are endless possibilities in this very simple project. As an extra gift, I've included my templates for both small and large 6-pointed stars, 4-pointed stars, and a funky asymmetrical one as well.



Larger 6-pointed star:  
3cm from point to point

Smaller 6-pointed star:  
2cm from point to point

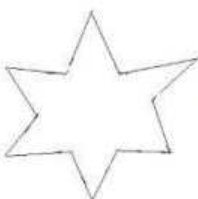
Larger stars can be made  
but smaller ones are very  
fiddly



Larger 4-pointed star:  
4.5cm along the vertical  
axis

Smaller 4-pointed star:  
3.5cm along the vertical  
axis

Larger stars can be made  
but smaller ones are very  
fiddly



Asymmetrical star:  
5cm in diameter

## Fabricate the Basic Star

**Photo 1** Trace your chosen template on the paper and glue it to the metal sheet.

**TIP:** Spray glue is water soluble, easy to clean up, and gives a thin, even coat. The saw blade won't shred the tracing paper as it does normal paper, making it easier to see the design especially during intricate piercing.

**Photo 2** Saw out the star. I find that tilting the saw forward a little will help to saw a straight line.

**Photo 3** Use a file to clean up and round the edges.

**Photo 4** Trace a guideline joining one point to the opposite one. With the separating disk, lightly cut into the metal. Push the disk away from you and use multiple passes. Support the metal on your bench pin to give greater

## MATERIALS

22 gauge half hard sheet (brass, copper or sterling)

Tracing paper and water soluble glue

Ribbon or findings for hanging  
Materials to customize stars

## TOOLS

**HAND AND FABRICATION:** Saw and saw blades, fine separating disc, fine drill bit and flex shaft or Dremel, 2 chain nosed pliers, giles and sanding sticks

**TEXTURING:** Goldsmith's hammer, center punch, texturing hammer, rolling mill or whatever tools you use for your favorite textures

**PATINATION:** Glass, hot water, scrap of binding wire

## SOURCES

Most of the tools and materials for this project are available from well-stocked jewelry supply vendors, many of whom can be found in our Advertisers' Index, page 71.

## TO CUSTOMIZE, ADD . . .

Jewelry findings (ear wires, jump rings, or bail for wearable of your choice)

Textured paper, burlap, lace, leaves, or other texturing elements — but note that these may not survive the process, so this isn't the time for heirloom lace!

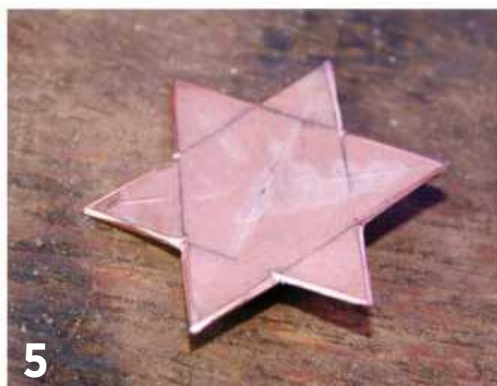
Liver of sulfur, ammonia, instant coffee, baking soda for patination and cleaning

Tassels or other decorative elements

Drop-shaped beads or pearls and 2 inches of 24 gauge wire (or gauge appropriate to the chosen bead to suspend it)

## Design Start

This design started with the compass rose. I love the shape, but the 8 points ended up being a little too much, so I simplified it to 6 and, then, to 4. Since I love the holidays, I just had to add a ribbon and hang them all around the house. This project is meant to be a simple and fun project that people can make multiples of to decorate their houses, to add a special touch to gifts, or to give as small gifts. I will be adding a star to my Christmas cards this year.



**Photo 5** Keep cutting until the scored line can just barely be seen on the front of the star. Don't cut too deep, or the piece may break when it is folded.

**TIP:** A shallower cut will lead to more rounded folds; a deeper cut will give sharper edges.

**Photo 6** Use two sets of pliers, one on each side of the scored line, and lightly bend it up. We are not trying to form the peak, just confirming where each peak will be. Work around the star until each leg has a gentle curve.

**TIP:** The paper may start to peel off during the bending. I try to keep it on as long as possible, since it protects the metal from scratching. It is easier to avoid scratches than to remove them.

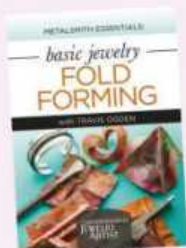
**Photo 7** Turn the star around and work from the front, pushing down the area between the points and pushing the center of the points up.

**TIP:** Make sure to grasp all the way near the center, so the entire fold is well defined.

**Photo 8** Drill a small hanging hole near the tip of one leg and remove any burrs from the edges, drilled hole, and back.

**Photo 9** Clean the star with warm water, removing any remains of glue or paper. Thread your hanging ribbon and tie a pretty bow.

## LEARN MORE



Basic Jewelry Fold Forming with Travis Odgen (video)

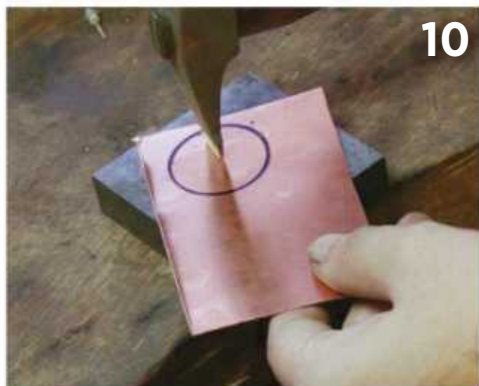
[www.interweavestore.com](http://www.interweavestore.com)

precision and to avoid having the disk try to circle around the edge to the front side.

Important — always wear safety glasses and a mask when using separating disks. They are brittle and can shatter, and they throw out a lot of rough metal dust. Both can hurt your eyes.

**TIP:** Don't force the separating disk on the metal; use light strokes. Pushing down too hard won't cut faster, but it will wear the disk down faster and increase the risk of breakage. If the metal is heating up too much, decrease the pressure.





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### Texture Variations

For texturing, trace a 1 inch (large star) or a  $\frac{3}{4}$  inch (small star) circle on the metal sheet and mark the center. This is the area that needs to be textured.

**Photo 10** For a barklike texture, use a goldsmith hammer and work around the star.

**Photo 11** To create a stippled texture, use a pen to mark small dots radiating from the center of the circle, getting farther apart the farther you go from the center. Lightly strike the dots with a center punch, using your original dots as a guideline.

**Photo 12** If you have access to a rolling mill, you can create an almost endless variety of interesting textures. Make a neat little pile of a sheet of thin card stock (like a manila folder), the sheet of metal, and your chosen texturing material; if it is a harder metal, place a second sheet of metal over it to protect your rollers. Fold the card stock over to create an envelope.

**Photo 13** Tighten the rolls on the mill until the envelope can barely fit through and then a quarter to a half turn more. It should be hard but not impossible to roll. Feed the envelope into the mill and roll it through, keeping the speed as consistent as possible, as that will give a more even result.

After the metal has been textured, go back to the beginning of the instructions and cut out a star. Texturing should always be done first, since it can stretch the metal and deform the shape.

### Adding Patinas

There are a great number of patinas for copper, brass, and silver. Some are simple and easy, others require more precise chemistry. Liver of sulfur is a basic formula that most metalsmiths know and love, but two simple variations can kick it up a notch.

**Photo 14** Clean your piece well with baking soda, and rinse and dry it. Prepare



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## TIPS FOR SUCCESS

Avoiding scratches is easier than removing them. Keeping the sheet covered with paper helps. Another good tip is to sand the surface of your pliers up to 1000 grit, so that it is nice and smooth.

Since all the scored lines cross at the center, it is easy to remove too much metal there. Always use the lightest pressure when moving over the center.

A deep score will give a very sharp raised line but it also weakens the metal. If you want that look, run a little solder in the scored line after bending it up to strengthen it.

## #1 Design Elements

- Volume, radial symmetry, repetition
- Finish and texture can customize the basic design

## 3 EASIER WAYS



- Use precut blanks or a hydraulic press instead of sawing.
- For stars with an odd number of legs, only score to the center of the star.
- Substitute the ribbon for ear wires or a jump ring for a wearable star.



## see more work

Their Turn  
PAGE 8



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## 2015 HOLIDAY ORNAMENT CONTEST

Visit Jewelry Making Daily to enter.

[www.jewelrymakingdaily.com/2015ornament-contest](http://www.jewelrymakingdaily.com/2015ornament-contest)

## #1 Design Challenge

When I began, I was afraid the folded edges wouldn't be strong enough because of the scoring. I was happy to find they hold just fine for lighter use; if something extra sturdy is needed, running a little solder through the groove after bending helps.

a weak liver of sulfur solution by adding a small amount into a cup of hot water. The solution should be a pale straw color. Dip the piece in and watch the color develop. Remove and rinse when it is dark enough.

**Photo 15** Alternative 1. Add half a teaspoon of ammonia to the basic liver of sulfur solution. This will allow more vibrant colors to develop. Dip the piece in the new mixture for 15 seconds, remove, rinse to stop the reaction, and check the color. If you are not happy with the color, dip it again. For silver, the color will change from yellow to browns, to reds and purples until it becomes black. Copper will get the reds and purples only.

Alternative 2. Add a teaspoon or two of instant coffee to the basic liver of sulfur (without the ammonia). The smell will be vile but the result will be vibrant blues and greens in silver.

**Photo 16** Each silver star in this photo received a different patina. The large star was dipped in plain liver of sulfur; the small one on the left in liver of sulfur and ammonia; the one on the right, in liver of sulfur and instant coffee.

## Adding Ornamentation

To add a tassel or drop, just drill a second hole opposite the hanging hole for the ribbon and thread on the additional element.

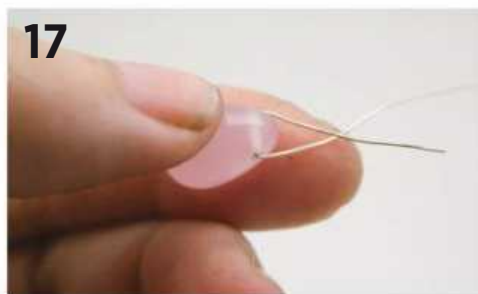
**Photo 17** To add a briolette or drop, slide it a 2 inch length of wire, crossing up the ends above it so that one end is significantly shorter than the other.

**Photo 18** With pliers, bend back the short end, and start to make a loop.

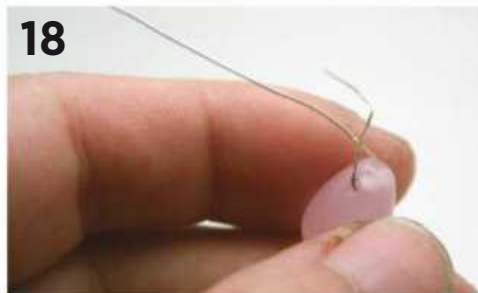
**Photo 19** Slide the star onto the half-formed loop and bend the wire down.

**Photo 20** Wrap the long end of the wire around and around, covering the cross and the short end of the wire. Tuck it in and snip the end, if necessary.

**BEATRIZ FORTES** began metalsmithing in 2008 and has had her work published in Brazil, the U.S., and the U.K. See her work at [www.beatrizfortes.com](http://www.beatrizfortes.com).



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19



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By Sharon Elaine Thompson



## Moonstone

*appreciated for its soft, reflected glow*

### SUBTLE AND MYSTERIOUS,

the glow of a moonstone enchants viewers — and probably makes this one of the most underrated of the phenomenal stones, so-called for their special optical phenomena. The typical blue glow seen in material cut as cabochons is often described as billowing or floating. The most prized and valuable of these orthoclase feldspar gems feature this floating blue glow in a translucent whitish or transparent body. The more common examples exhibit a white glow in a white body.

Moonstones may come in other body colors, such as peach, golden, gray, or brown. In these, the floating glow is white or takes on the body color of the stone. Whatever the body color, the stone should be translucent to semi-transparent to best display its mesmerizing light. “Rainbow” moonstones are actually another form of feldspar, labradorite, and though they have a similar appearance, they are also the result of a different type of internal structure.





You might also play with the word association of the moonstone, including them in a piece about night. Art Nouveau jeweler René Lalique once designed a playful pocket watch in which images of bats in flight were interspersed with small moonstones.

No matter what piece of jewelry you set a moonstone in, be sure to showcase the phenomena. Pale blue sapphires or aquamarines can help emphasize the moonstone's glow — just be sure the color of the accent stones doesn't overpower the moonstone effect, technically called adularescence.

You might also play with the word association of the moonstone, including them in a piece about night. Art Nouveau jeweler René Lalique once designed a playful pocket watch in which images of bats in flight were interspersed with small moonstones.

**How much does it cost?** Usually cabs are very inexpensive, \$2 to \$20 per carat. However, fine moonstones with transparent body colors and pronounced adularescence are as rare as any other fine gemstone and can sell for more than \$1000 a carat.

**How hard is it to find?** Commercial-quality moonstones are easy to find at most gem shows and online.

**What kind of jewelry can I put this in?** Almost any kind of jewelry; hardness is 6 to 6½. However, orthoclase feldspar does have two directions of easy



cleavage. It is not a great choice for a ring that will get regular or hard wear.

**How easy is it to set?** Easy. Moonstone cabs are usually flat on the bottom and either round or oval in shape. In some older cut stones, the bottom may be slightly convex — an attempt to increase the weight; sometimes the cab domes are very high or steep. Those stones would present more challenges in setting.

**What settings are best for this stone?** Bezels are the most common setting; however, prongs are also good.

**Artisan/studio dos and don'ts:** Do not steam or sonic. Use caution with setting so as not to chip or break the stones along lines of cleavage.

**Wearer dos and don'ts:** Wear rings for special occasions to avoid the blows that can occur with everyday wear.

Store carefully to prevent chipping or scratching by other jewelry.

## Special Occasion Ring



**MYSTICAL MOONSTONE RING**

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30



**SHARON ELAINE THOMPSON** is a freelance writer based in Oregon. She has written for *Lapidary Journal Jewelry Artist* since 1987. You can learn more about her and read previous articles at [www.jewelryartdiva.com](http://www.jewelryartdiva.com).



# JEWELRY PROJECT

**SKILLS**

- Metal fabrication
- Basic stone setting

**TIME IT TOOK**

Approximately 6 hours



# Mystical Moonstone Ring

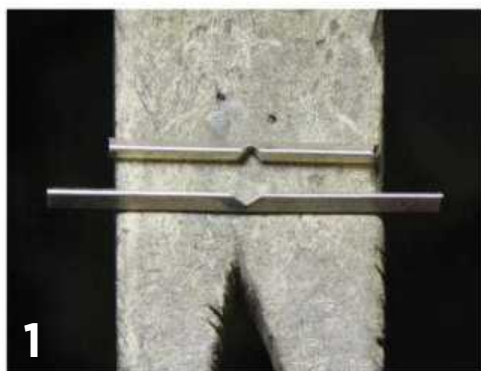
*Five simple elements create one powerful design*

**BY ROGER HALAS**



**ONE ALL-TIME FAVORITE** of many jewelry enthusiasts is the legendary moonstone, known for its glimmering sheen that seems almost magical. The name covers a range of feldspar gems, from its best known blue to equally magical cabochons from pearl white to near black, with various shades of ivory and gray in between. The question is what do you do with it? It's a challenge because such an interesting gem should be the star of the show, and it's often best to showcase it in a minimalist design.

For this project, I constructed a ring using 5 simple components and included one of the more complicated metal stock shapes — triangle wire. For many, this shape can be problematic because it tends to twist when bent or forged rather than remain flat, like it should. But don't worry! With our careful planning and ingenuity, you can create a spectacular ring that will dazzle any onlooker.



### Fabricate the Wire Sections

**Photo 1** Choose two lengths of #4 sterling triangle wire. The overall setting will be shaped like a kite, which requires that both sections are different lengths: one at 52mm, the other at 68mm. On each segment, cut notches at the midpoints. On the shorter length, cut out an 80 degree angle. For the longer one, cut out 100 degrees.

**NOTE:** This geometry is critical, so use a protractor to ensure that the angles are as specified.

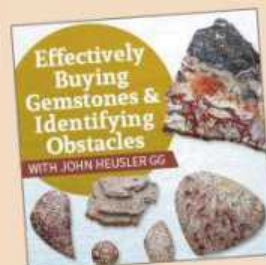
**Photo 2** Bend both wire sections. The 100 degree cut (the bottom piece)

produces a tighter angle, which when paired with the second component results in a quadrilateral (4-sided) shape known as a kite. If the angles were the same, the lengths would also be the same and it would be a diamond or rhombus. You could make it that way, but the effect wouldn't be as dramatic.

**Photo 3** Fill the corners with hard solder. This strengthens the joints for the filing required to make the two sections align properly. If the angles aren't perfect, the kite will be lopsided. Keep filing until everything is symmetrical.

**Photo 4** Assemble the kite.

## BUY THE BEST STONES



When setting moonstones or any of your favorite stones, you always want to buy and use the best. But how do you learn to identify and purchase best. One great resource for learning to buy stones is the on-demand web seminar, "Effectively Buying Gemstones and Identifying Obstacles," by John F. Heusler, G.G.

**Available at [www.interweavestore.com](http://www.interweavestore.com).**

### MATERIALS

- #4 sterling triangle wire
- 22 gauge sterling sheet
- Low dome sterling half round wire
- 1 moonstone cabochon in the 15mm range

### TOOLS

**HAND AND FABRICATION:** File set, protractor, jeweler's saw, rotary tool, small engraving bur, 400 grit sandpaper, 2000 grit automotive sandpaper, 400 grit radial bristle brush

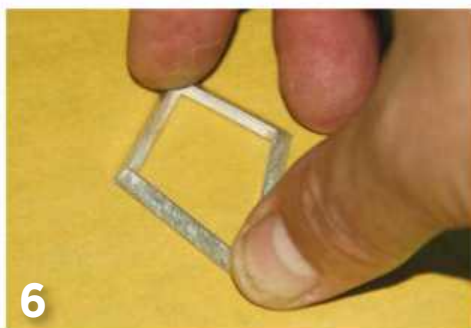
**SOLDERING:** Torch and setup

### SOURCES

Most of the tools and supplies for this project are available from well-stocked jewelry supply vendors, many of whom can be found in our Advertisers' Index, page 71.



This ring includes one of the more complicated metal stock shapes: triangle wire, which tends to twist when bent or forged. Don't worry! With our careful planning and ingenuity, you will create a spectacular ring that will dazzle any onlooker.



**Photo 5** Clean up any excess solder.

**Photo 6** The plan is to solder the kite to a sheet of 22 gauge. In order for this to work, the bottom must be absolutely flush with the base plate; otherwise the joint won't look or be clean. Get a piece of 400 grit sandpaper and sand on it against a flat surface, rubbing the kite against the paper until it's flat.

**Photo 7** Texture the piece with an engraving bur.

### Fabricate the Setting

**Photo 8** Use painter's tape to determine the circumference of the stone. Where the two ends meet, mark that with a pen. This is mostly a visual assessment with very little math involved.

**Photo 9** Transfer the tape to a piece of 22 gauge sheet, about 10mm high, and bend that into a bezel. Solder.

**Photo 10** Typically, I don't use tweezers or any of those fancy holding devices for soldering operations. Instead, I use strips of 22 gauge mild steel, cut with tin snips and bent into clamps. I use these to secure components for soldering. That said, solder the kite to the base.

**Photo 11** After that, solder the bezel to the base. Once again, use those mild steel soldering clamps.

**Photo 12** Low dome half round wire is made specifically for ring shanks. Here, I'm using enough to make a size 7.5 ring. If you're making this for yourself, use whatever amount you need to make a good fit. If it's for someone else,







## More Moonstones



PAGE  
28

SMOKIN' STONES

determine their ring size and use that as a reference.

**Photo 13** Cut the shank.

**Photo 14** Use a large file to flatten the bottom of the shank. Do not use sandpaper: it rounds the edges too much for the shank to sit flat.

**Photo 15** The two completed components.

**Photo 16** Since this shank is relatively wide, it can stand upright without the assistance of any type of support, like tweezers. There is a catch, however. If you flux both sides, the shank will slip out of alignment. The solution, then, is to solder one side at a time.

**Photo 17** With the 5 components soldered in place, this project now becomes a simple matter of cleanup, and one final stone setting. For the cleanup, 400 grit sandpaper gets things done fast.

### Set the Stone

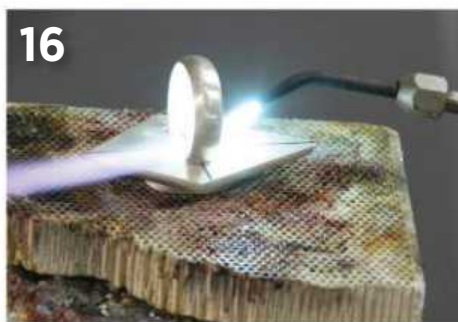
**Photo 18** Setting a stone can be easy — or a downward spiral into a whirlpool of frustration. Why? Because if, when setting a stone, the bezel pusher slips, it could damage the work around it. Badly. To avoid this, I cover any potentially vulnerable areas with painter's tape, and set the bezel.

**Photo 19** At this point, you could polish the ring and wear it. But to make things more interesting, you could also put some details around the border like I did. To do this, you can use either a jeweler's saw or a knife edge file to cut notches at specified lengths, and then shape the notches using a combination of flat and round files. Basically, you're carving the border, and you just keep carving until you have the look you want.

After that, use 2000 grit automotive sandpaper (available at Pep Boys) to remove the file marks. This creates an overall satin finish, which you can

brighten even further by going over it with a 400 grit radial bristle brush. This doesn't take the finish back to 400 grit, like sandpaper would, because those bristle brushes aren't that aggressive. Instead, it complements the finer 2000 grit by creating a bright yet subtle finish that does not overshadow the moonstone.

**ROGER HALAS** is a stone cutter, metalsmith, and jewelry designer in Southern California. His clients range from the general public to performing artists working in the film, television, and music industries. He can be reached at [rhalas@jungleintrigue.com](mailto:rhalas@jungleintrigue.com)







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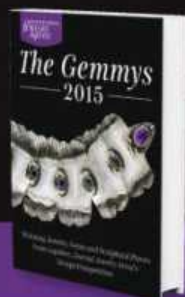
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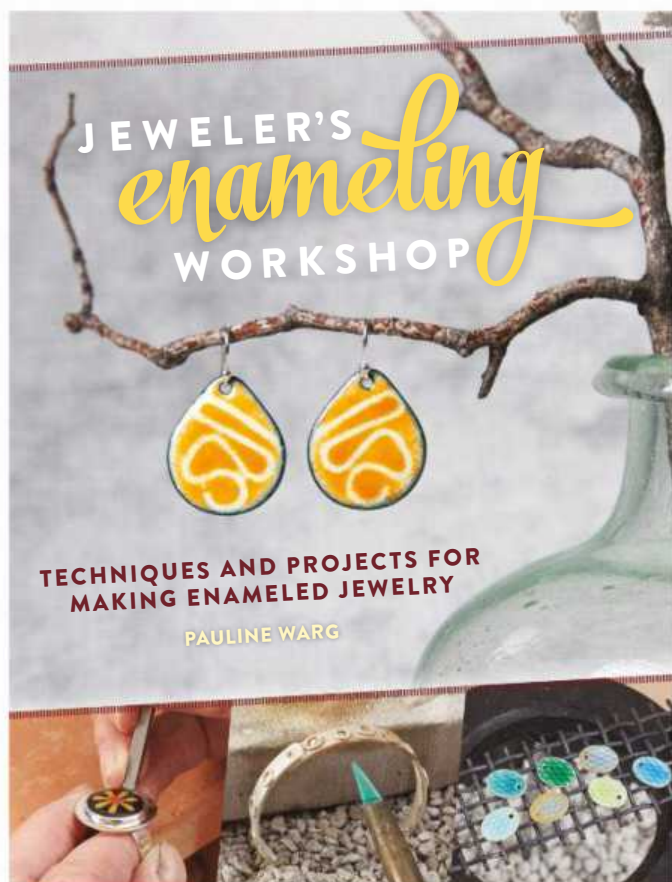
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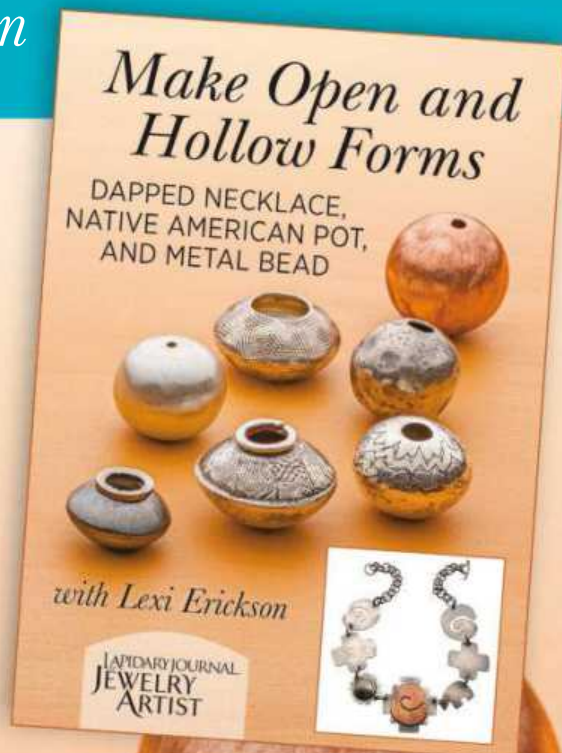
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## JEWELRY PROJECT

### SKILLS

- Fabrication
- Soldering
- Hand forming

### TIME IT TOOK

4-5 hours



**AN  
EASIER  
WAY**

*See page 41*

# Mixed Metal Pebble Pendant

*Create a hollow form inspired by a beach find*

**BY KATE CASE**

**AS AN AVID BEACHCOMBER,** I've collected many pebbles and rocks over the years because I'm drawn to their shapes, forms, and colors. I've often been fascinated by the ones that have one or more stripes of another rock type crossing the pebble, so I wanted to make a piece that reflected that contrasting element within the purity of a simple pebble form.



### Sizes and Shapes

**Photo 1** After studying my inspiration stones, I decided to use a 30mm x 26mm ellipse template. Take into account the fact that an oval or ellipse will end up slightly narrower and smaller overall after forming.

**TIP:** Asymmetrical shapes are more challenging to form evenly and make the two halves match, so stick with a symmetrical shape unless you are experienced with this type of forming. Here are the easiest to hardest shapes for this project: circle; oval/ellipse; asymmetrical organic shape; geometric shape or anything with corners.

Select three pieces of metal allowing enough to cut out two outlines of your shape once the pieces are soldered together side by side. For this pendant, I used two strips of sterling silver approximately 15 x 55mm each and one strip of gilding metal 4mm x 60mm. The contrasting metal strip needs to have parallel sides.

**Photo 2** To create a parallel strip, first make sure you have a dead straight edge. Using that edge as your guide, run along with either Vernier calipers or dividers set at the appropriate distance to scribe a line.

Cut just outside this line with your saw and then file down to the line.

Make sure all the edges to be soldered are extremely well fitted. Even if your metal has a straight edge from a

guillotine shear or is as you purchased it, still mark a line and file to it to ensure the joining surface is dead flat. Guillotines tend to pinch the edge and leave an uneven surface.

**TIP:** Holding the sheet up to the light and checking reflections on the edge is a good way to see that it's dead flat and even.

Lay the three pieces of metal side by side on a very flat soldering surface and solder them together using hard silver solder. Be generous with the amount of solder and careful not to overheat. It can be difficult to fix pits or gaps in the solder, so try not to let any occur in the first place.

**Photo 3** Once they're soldered, file and sand the joined pieces on both sides to remove any excess solder and inspect the 3 pieces of metal carefully.



## Design Start

Inspired by the simplicity of smooth beach pebbles with contrasting stripes, I made a pendant that has a classic simplicity and volumetric form without being heavy.

### MATERIALS

Sterling silver

0.9mm (19 gauge) gilding metal (a brass with 95% copper and 5% zinc; other brass alloys or pure copper may also be suitable)

Sterling silver multi-strand cable and findings

### TOOLS

**LAYOUT:** Ellipse template, straight edge, ruler, scribe, Vernier caliper or dividers

**HAND AND FABRICATION:** Jeweler's saw, files, ball peen or doming hammer, dead weight Delrin mallet or rawhide mallet, small stake or medium size dapping punch, stump or wooden surface for forming into, drill and burs, wet and dry sandpaper 240-800 (medium/course to fine), steel wire texture brush

**SOLDERING:** Torch medium size, general soldering setup, hard and easy silver solder, paste flux

**FINISHING:** Pumice powder or other finishing product

**OPTIONAL:** Ferric chloride

### SOURCES

Most of the tools and materials for this project are available from well-stocked jewellery supply vendors, many of whom can be found in our Advertisers' Index, page 71.





4



5



6



7

**Photo 4** Use a piece of tape to make a handle. This is a useful way to sand the pieces on a flat surface.

### Create the Metal Shapes

**Photo 5** Mark the halfway point on the metal to ensure the shape will fit into it twice. Mark the design with a scribe for one half and then saw it out. File the edges to even out the shape and then use that piece as a template for the other half.

**Photo 6** Using the first piece as a template, flip it over so that the second piece will be a mirror image of the first. Make sure you line up the stripes of contrasting metal exactly before scribing around the edge of first piece.

File and clean up the edges of the second half until the pieces are identical. The edges should be at 90 degrees square.

**TIP:** Use double-sided tape to stick the two halves together while filing the second one to ensure both sides match.

**Photo 7** Once the two halves match and are cleaned up and smooth, they are ready for forming.



10

### Form the Pebble Halves

**Photo 8** Use a hammer to dome the pieces into a shallow hollow on a stump or piece of wood. I start on the outside and work around the shape and then move into the centre.

**TIP:** Make sure you're doming the correct side of each of the shapes! If in doubt, mark the outside surfaces of both pieces with a Sharpie before starting so you don't inadvertently form one half the wrong way.

**Photo 9** Check your progress after the initial forming is completed.

**Photo 10** Once the curvature is the same on both halves, use a mallet to bring the edges down over a small stake to puff out the form slightly. As well as making the form a more pleasing shape, this also gives you a better edge for soldering. Place the piece on the stake so that there is a small gap under the edge and then mallet the edge down, working your way all around the form.

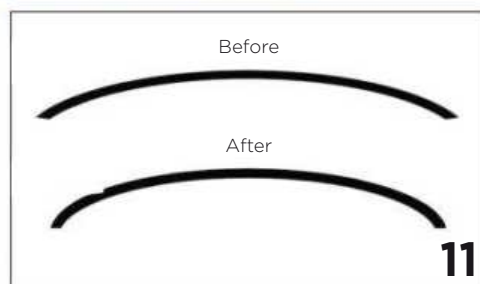
**Photo 11** Refer to the diagram to confirm the pieces are curved as shown and anneal the metal as required to continue being able to shape it.



8



9



11

## #1 Design Elements

Line, form, color

## #1 Design Principles

Contrast, asymmetry, balance

## PERFECT YOUR HOLLOW FORMS

Intrigued by the hollow form that Kate demonstrates here? You can learn more about creating hollow forms with Lexi Erickson's new video, "Make Open & Hollow Forms."

Available at [www.interweavestore.com](http://www.interweavestore.com).



12



13

**Photo 12** The edges of the pieces need to sit as flat as possible as well as match each other when you hold them together. Getting the edges to match can be a bit tricky! Keep malleting and checking, making slight adjustments as you go, until the pieces fit closely together. You may need to hold the piece sideways on a wooden surface and very lightly mallet down onto an edge to shape it. Do whatever it takes to get the two halves to match. Also mallet the whole surface over the stake to even it and smooth it out as much as possible.

**TIP:** Don't use a metal hammer on the outside of the piece over the stake, only a mallet, because a metal hammer over a metal stake will cause spot stretching and distortion and then the two halves won't match.

Once you've got both pieces matching as well as possible, anneal them again to make sure there won't be any movement or warping when you solder them. Check one last time that they match, adjust if necessary and re-anneal, and then sand the edges on a flat surface.

**Photo 13** Once the edges are sanded down, the two halves should now line up perfectly when held together.



14



15

**Photo 14** Inspect the two formed halves from above, and before you prepare for soldering, drill at least one air hole on the back half. Work out where the chain or cable will be passing through the piece and drill in those spots.

**TIP:** If your piece isn't going to be wearable, you only need to create one air hole.

**Photo 15** Melt small pieces of easy solder all around the edge of one half. I use a pair of modified third hand tweezers to sit the piece on, which gives good access for the torch underneath with little heat sink effect. The photo shows the fluxed piece with solder in position, ready for heating.

**TIP:** Be generous with your solder; if you have gaps after heating, they can be difficult to repair. Excess solder will be filed off the outside anyway, so don't worry if you use "too much."

## #1 Construction Challenge

Getting the initial solder seams perfect and doming the piece without them opening up. Keeping the doming fairly shallow helps match the halves so they line up perfectly.

## AN EASIER WAY



Instead of two domed halves, use one domed piece for the front but a single flat sheet for the back. You won't have the difficulty of forming the two halves to match each other, yet the piece will look similar from the front.





## #1 Design Challenge

Keeping the integrity of the simple and smooth form, without the visual disruption of a bail, while making it able to hang as a pendant. Solution: drill 2 holes and insert a cable.

Once you've melted the solder onto one half, pickle or clean it if necessary, filing lightly to remove any oxidation. Position the other half on top of it after fluxing both pieces. You may find it necessary to lightly wire the pieces together with binding wire so they don't shift out of position as you're heating. Reheat the whole assembly top and bottom to remelt the solder and join the halves together. Be careful not to overheat; you don't want the solder seams across the piece to remelt.

**TIP:** If you only have one air hole drilled, *do not* put the piece in the pickle afterwards, because it will get inside the form and then leak out all over your hands and tools as you're cleaning it up. If necessary, clean the piece in hot water or an ultrasonic cleaner. If there are two holes in your

piece, you can pickle, but take care to flush water through the piece thoroughly to remove all pickle residue.

Use files and sandpaper to clean up the piece, removing any excess solder and paying particular attention to refining the edge to make sure it follows the solder seam evenly all the way around. Finish the surfaces to your desired finish. The examples shown here have been taken up to 800 emery paper, etched briefly (2 minutes) in ferric chloride to slightly etch the gilding metal, and then lightly textured with a wire brush before being hand scrubbed with a slurry of fine pumice powder and water.

**Photo 16** Bur out the air holes to accommodate a cable or chain. For this pendant, I fitted the cable through the form before attaching the findings on the ends so I could keep the holes small. This means the piece is permanently attached to the cable and can only be changed by removing the finding off one end. You may prefer to make the openings larger so you or a customer can easily swap the pendant onto different chains or neckpieces.

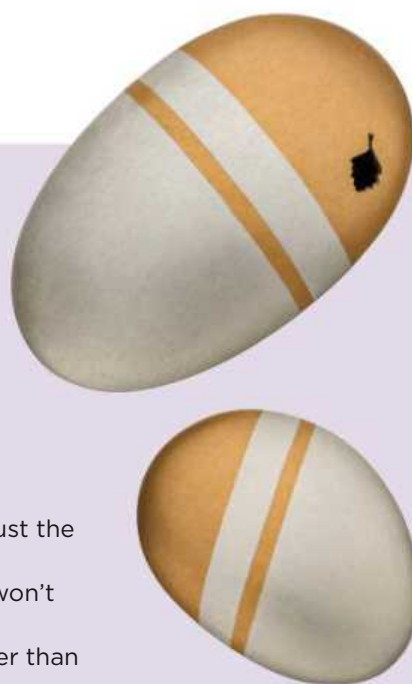
**KATE CASE** is a Tasmanian jeweler who specializes in handmade one-off pieces, often inspired by patterns and forms encountered in the natural world. Visit her website — [www.katecase.com](http://www.katecase.com) — to see more work.

## DESIGN OPTIONS

If you make this a non-wearable object, you can have some fun by using the air hole as a decorative feature, such as this example with a saw pierced leaf shape.

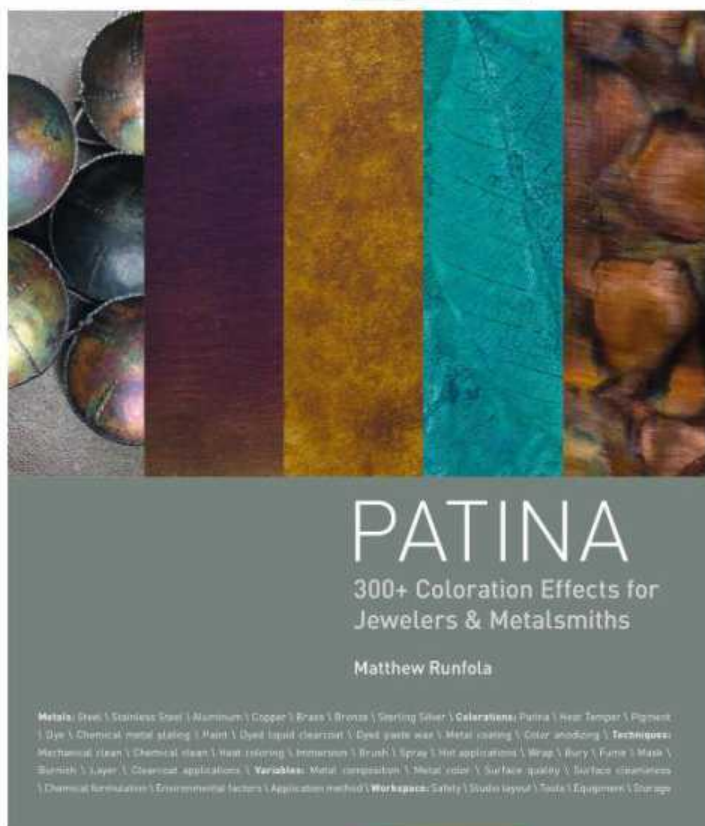
Also try:

- more than one strip of contrasting metal
- more than two contrasting metals
- patinas or other finishes
- multiple pierced out shapes
- a selective etchant to etch only one metal: ferric chloride to etch just the gilding metal, or ferric nitrate to etch just the silver
- non-parallel contrasting elements; in this case the front and back won't match up so consider leaving the back plain
- contrasting elements of different shapes, e.g., with contoured rather than straight edges



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By Deborah Yonick

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GREEN FLASH

Every fashion conversation begins with color! Color defines the mood and attitude of each season, and the fashion faithful follow Pantone for cues, heralded on the runways of leading ready-to-wear designers. For spring 2016, the palette offers a reprieve from the daily grind and our 24/7 obsession to be connected, offering colors that inspire us to breathe, reflect, and play.

"Technology plays a huge part in people feeling like they want to stop the world and get off," describes Leatrice Eiseman, executive director of the Pantone Color Institute. She explains that because our culture still is surrounded by so much uncertainty we continue to yearn for colors that transport us to happier, sunnier places where we can unwind and express a wittier version of our real selves.

The softer, comforting colors inspire relaxation and musing, while the brighter, vivid hues encourage curiosity and exploration. It's not surprising that serene shades of blues and greens continue to dominate the palette, but the season's most popular color for collections for both women and men is **Rose Quartz**. This radiant blush pink dovetails beautifully with **Marsala**, Pantone's 2015 Color of the Year. Also helping to bring heart rates down — a yummy smooth **Peach Echo**, airy sky blue **Serenity**, and refreshing aqua-infused **Limpet Shell**.



CLOCKWISE FROM TOP

Topaz

ALL GEM PHOTOS: COURTESY AMERICAN GEM TRADE ASSOCIATION

**Le Vian**

Pendant

Sea blue aquamarine, chocolate and vanilla diamonds, 14K vanilla gold  
PHOTO: COURTESY LE VIAN

The Mara Hoffman SS16 Runway Show at The Gallery, Skylight at Clarkson Square.

PHOTO: NEILSON BARNARD/GETTY IMAGES FOR MARA HOFFMAN

The Supima Design Competition fashion show during Spring 2016 New York Fashion Week: The Shows at The Gallery, Skylight at Clarkson Square.

PHOTO: NEILSON BARNARD/GETTY IMAGES FOR NYFW: THE SHOWS

“Of course, the color Rose Quartz will bring its namesake gem into the spotlight!”



ROSE QUARTZ



PEACH ECHO

**ABOVE**  
Jeremy Scott Spring 2016 during New York Fashion Week: The Shows at The Arc, Skylight at Moynihan Station.  
PHOTO: FRAZER HARRISON/GETTY IMAGES

**RIGHT**  
The Kye fashion show during Spring 2016 New York Fashion Week: The Shows at The Space, Skylight at Clarkson Square.  
PHOTO: BRIAN ACH/GETTY IMAGES FOR NYFW: THE SHOWS

**TOP**  
Kunzite



**ABOVE**  
The Marissa Webb fashion show during Spring 2016 MADE Fashion Week at Milk Studios.

PHOTO: BRIAN ACH/GETTY IMAGES FOR MARISSA WEBB

**LEFT**  
Morganite



Among the richer, more vibrant colors in the palette are a happier, energetic navy in **Snorkel Blue**; a bright, springy **Green Flash**; a free-spirited crimson **Fiesta**; and a sunny, cheerful **Buttercup**. The perfect transitional neutrals round out the mix in earthy, grounded **Iced Coffee** and a delicately distinctive **Lilac Gray**.

Designers this season drew inspira-

tion from artists known for bold color usage and strong shapes and lines like Matisse, Picasso, Frank Stella, Esther Stewart, and Sam Falls. Also top of mind are destinations south of the border including Cuba and Mexico, as well as lush vegetation in urban design, best expressed in courageous color statements that combine vibrant with classic, natural tones.

Eiseman sees less focus in fashion on “seasonal” colors, hailing all hues “season-less.” “It’s about how the color makes us feel, regardless of season,” she says. “People want timeless pieces that don’t go out of style or season. This mindset has given designers the creative freedom to work with any color necessary to portray their inspirations, rather than feeling confined to use colors based



# TRENDS

on particular seasons. It has opened up many new color combinations.”

## GEM PALETTE

Transcending cultural and gender norms, this unisex, universal palette falls into the color trends recently seen in the gemstone world, with a variety of popular red and pink tones, as well as seas of blues and greens.

“Sapphire and turquoise will be hotter than ever with the introduction of colors like Snorkel Blue and Limpet Shell,” cites Amanda Gizzi, director of public relations and special events for Jewelers of America. “Ruby and peridot won’t be reserved just for the July and August birthstones with the focus on Fiesta and Green Flash. Of course, the color Rose Quartz will bring its name-sake gem into the spotlight!”

Gem families that come in a spectrum of colors complement Pantone’s palette perfectly, particularly sapphire, tourmaline, garnet, topaz, quartz, beryl, and spinel. Other popular gems found in these shades include diamond, moonstone, pearl, opal, zircon, and “ite” stones like tanzanite, iolite, apatite, labradorite, morganite, and kunzite.



**LEFT**  
**Le Vian**  
Drop Earrings  
Peach morganite, chocolate and vanilla diamonds, 14K strawberry gold  
PHOTOS: COURTESY LE VIAN

**ABOVE**  
**Le Vian**  
Cocktail Ring  
Peach morganite, chocolate and vanilla diamonds, 14K strawberry gold

In addition to Pantone’s forecast, also keep on your radar leading brands that invest in and share their trends research with the industry, like LeVian and Swarovski, for clues of what will be popular in colors and gemstone designs.

LeVian, of Chocolate Diamond fame, named peach morganite Gem of the Year for 2016 in its 16<sup>th</sup> annual runway show and Red Carpet Revue in Las Vegas in June, based on trends researched with *Harpers Bazaar*. The Great Neck, New York, manufacturer cites strong demand for the color and stone that goes well with rose gold and

brown diamonds. It also cites sea blue, blueberry, and bordeaux as popular shades in gems like diamond, aquamarine, topaz, tourmaline, tanzanite, and garnet.

Fashion’s favorite crystal and gemstone brand, Swarovski, also debuted in June its 13<sup>th</sup> annual Gem Visions trends forecast for 2016 that recognizes top design directions and key colors: **Magic** inspires artists to work with techniques that blur the boundaries between the physical and digital, with gradations of shades, reflective surfaces, and iridescent effects important. **Eternity** is a longing to recreate the past by breathing new life into what has been like combining ancient techniques with modern technology in key colors including honey, amber, and citrine, with flashes of orange, blue, and green mixed with off-whites. **Body Art** explores jewelry’s intimate relationship with the human form, turning it into an installation space for new jewels in like shades of pink and burgundy with hints of amethyst and turquoise. **Radical Craft** centers on the Maker Movement, an evolution of the DIY mania pushing personalization, with masculine tones key in industrial grays and khakis softened by highlights of orange and pink.

**Swarovski Gem Visions 2016**  
Magic  
PHOTO: COURTESY SWAROVSKI



making connections that your customers can relate to — and everyone can relate to some shade of pink, orange, red, blue, green, purple, and yellow, says Cheryl Jester, trend and communication manager for Swarovski Genuine Gemstones and Created Stones in New York. She notes that the tonal aspect of using the many shades of a color family creates a soft but important statement.

Speaking the Pantone language can help you communicate color in a way that resonates with your customers, reinforcing the popular seasonal hues consumers are already seeing in other categories like fashion and interior design. “It gives you the opportunity to jump into the broader conversation and turn the spotlight on select gemstones and jewelry designs you can provide,” says Gizzi.

Make connections with customers on your website and social media platforms using hash tags in your posts like #Rose-QuartzGems, and promote the ones you are using to your customers so they can get in on the conversation.

**DEBORAH YONICK** has been writing about jewelry and fashion trends for more than 20 years for trade and consumer publications and online, and has loved both for much longer! With roots in New York, she presently lives and works in York, PA.



**ABOVE, CLOCKWISE FROM LEFT:**

Carmen Marc Valvo Women's and Men's Collection S/S 2016 during New York Fashion Week: The Shows at The Arc, Skylight at Moynihan Station.

PHOTO: FRAZER HARRISON/GETTY IMAGES FOR CARMEN MARC VALVO

Garnet

Model Gigi Hadid wearing Anna Sui Spring 2016 during New York Fashion Week: The Shows at The Arc, Skylight at Moynihan Station.

PHOTO: FRAZER HARRISON/GETTY IMAGES FOR NYFW: THE SHOWS

Alice + Olivia By Stacey Bendet Spring 2016 during New York Fashion Week in New York City.

PHOTO: ROB KIM/GETTY IMAGES FOR ALICE + OLIVIA

**LEFT, CLOCKWISE FROM LEFT**

The Anteprima fashion show at Milan Fashion Week Spring/Summer 2016 in Milan, Italy.

PHOTO: VENTURELLI/GETTY IMAGES FOR ANTEPRIMA

Citrine

Stella Nolasco Spring 2016 during New York Fashion Week: The Shows at Pier 59.

PHOTO: NOAM GALAI/GETTY IMAGES FOR NYFW: THE SHOWS





## JEWELRY PROJECT

### SKILLS

- Precision sawing
- Precision soldering
- Photography

### TIME IT TOOK

7 hours plus two  
24-hour periods  
of drying time



**AN  
EASIER  
WAY**

*See page 51*



# Picture Perfect Heads or Tails Pendant

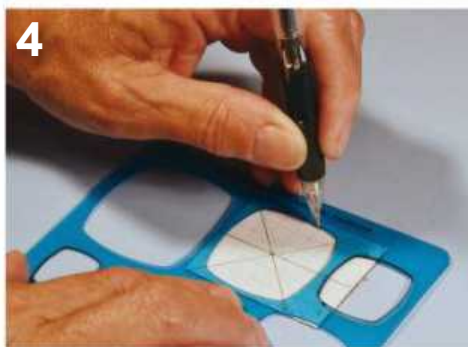
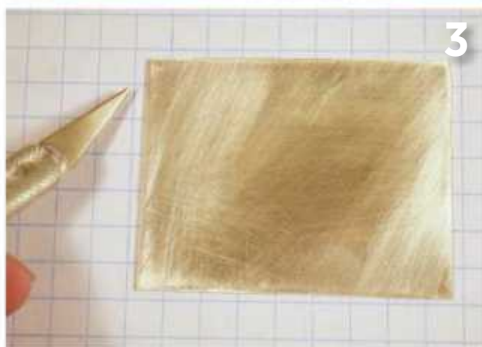
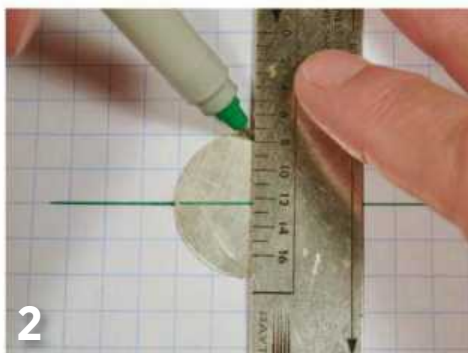
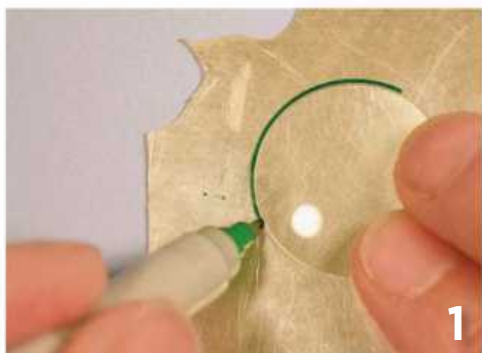
*Create an entertaining memento for a favorite friend*

**BY BETSY LEHNDORFF AND HANS LEHNDORFF**

# HEADS OR TAILS?

Inspired by the classic football coin toss — when a referee flips a quarter into the air before the game as opposing captains glower, this sterling silver pendant uses the same idea to create a piece of jewelry with a twist. Heads on one side; tails on the other. Protected by precision-cut, mineral watch crystals, this pendant also has built-in heirloom qualities.

This is a challenging project, though, for advanced silversmiths. Want something easier? Try a few of the individual steps, such as making the cushion shaped frame (a perfect focal piece) or soldering with a jig. Practice them over and over and watch your skills improve.



## Saw Out the Disc

**Photo 1** Using the watch crystal as your template, with a Sharpie mark a circle on the 22 gauge sheet sterling silver and cut out with the saw, sawing on the outside edge of the line. File and smooth the edges until the ink line disappears. Check the fit frequently to ensure it is round and just slightly larger than the mineral glass.

**Photo 2** Center a circle on graph paper and use a straight edge and Sharpie to mark the center of the disc. Use the graph paper as a guide to check roundness. Position the straight edge along an east-west axis. Score across the diameter of the disc with the scribe. Use the center punch to create a divot in the middle of the disc and drill a hole. Remove burrs with sandpaper.

## Make the Frame

**Photo 3** Anneal the 18 gauge sterling silver sheet. Sand both sides with 320, 400, 600, and 800 grit papers, scrubbing and rinsing the sheet before moving to the next finer grit. Apply spray adhesive to the back of the blank and center on the graph paper. Use an X-Acto knife to trim off any excess.

**Photo 4** Using a mechanical pencil and straight edge, draw two 90° diagonals across your graph paper. Next, draw a center line across the blank on an east-west axis. Center the cushion template over the grid until it is even all around and draw the outline, holding the pencil upright. Lines can be erased if you make a mistake.

## MATERIALS

18 gauge sterling silver sheet; 2 x 2"  
22 gauge sterling silver sheet; 1½" square  
28 gauge fine silver; 1 by 6 inch strip  
18 gauge round sterling silver wire; 4"  
1 foot of sterling silver tubing with an interior diameter of 1 mm. Make sure 18 gauge wire fits inside the tube.

Hard and medium wire solder

**IMAGES:** Sized and professionally printed photos on photo paper. The face and back need to be less than ¾" round so they will fit attractively within a 1" circle. (A full-service photo shop can help you with this.) Two 25.5-mm mineral glass watch crystals with flat backs and domed tops (See SOURCES.)

**NOTE:** If you use different size materials, you'll need to adjust the pattern.

## TOOLS

**HAND AND FABRICATION:** Magnification visor; safety glasses; respiratory mask; bench pin; wet/dry sandpaper grits 320, 400, 600, 800, and 1000; X-Acto knife and blades; jeweler's saw frame; 4/0 blades and lubricant; half round ring file; metal shears; jeweler's angle; wire cutters and two pairs of jeweler's pliers; hallmark stamps; bench block and chasing hammer; Moore's fine grit sanding disks and mandrel; toothpicks; bezel burnisher

**LAYOUT:** Graph paper; spray adhesive; fine point Sharpie; mechanical pencil; straight edge; scribe; center punch and small drill bit; circle template; cushion template; digital calipers with set screw; high-quality compass with lead refill

**SOLDERING:** New, 6 x 6" soft Solderite board; soldering pick; torch; Prip's flux in spray bottle; coins; solder stop (a paste of yellow ochre and alcohol in a sealed jar); small brush; T pins; copper tongs; quench; pickle; rotating soldering pan

**FINISHING:** A fresh tube of E6000 or equivalent waterproofing glue; 600 grit nail salon sanding sticks; shot filled tumbler and burnishing compound or Dawn dishwashing liquid; flexible shaft with polishing buffs; Tripoli polishing compound; toothbrush; hot, soapy water; penetrating oil; masking tape; beads; cable; crimps; crimp covers; clasp and catch

## SOURCES

For this project, a fully equipped studio is helpful. Most tools and materials are available from well-stocked jewelry supply vendors, many of whom can be found in our Advertisers' Index, page 71. The 25.5-mm domed, magnifying flat back mineral glass watch crystals (Item #201700,) are from [www.Esslinger.com](http://www.Esslinger.com). Cushion template is from Cool Tools.



## START WITH GOOD PHOTOS

- Images must be smudgeproof or they will smear during fabrication.
- Glue darkens photos, so increase brightness levels when printing.
- Keep image simple and colors bright.
- Use a solid background.
- Stand back. On a 4 by 6 inch print, the face should be less than  $\frac{3}{4}$  inches round.

## Design Start and More

This flip pendant features a photograph of Betsy's Hubbard Lake, Michigan neighbor Kaden Misra on one side and the back of his head on the other, but don't let your imagination stop there. You can try:

- a hidden photo on one side and a cabochon on the other
- a baby photo and birth date
- endless front and back pet photos
- a favorite quote and author
- even a joke and punch line!

**Photo 5** Using the 22 gauge disc as a template, place it in the exact middle of the cushion outline, checking the graph paper grid to make sure all sides are equal. Draw a circle on the graph paper in pencil. Also mark a hole through the center of the disc into graph paper. This is a guide for the larger circle you will draw with a compass.

**Photo 6** Using a straight edge, score the east-west axis with a sharp XActo knife. (This line will match up with the line you scored across the diameter of the 22 gauge disc.) Create a divot at the center and drill a hole.

**Photo 7** Insert the sharp point of the compass into the blank's center hole and widen it to draw a circle 1.5 mm larger than the first circle.

**Photo 8** On your bench pin, insert your saw blade into the blank drill hole and saw out a circle, using plenty of lubricant. Cut away the outside frame.

**Photo 9** Smooth and round the hole to 27.5 mm, using the ring file and digital

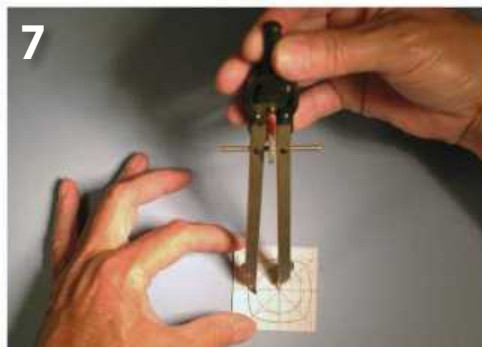
calipers to check your progress. Flip the frame often to work from both sides.

**NOTE:** The jaws at the top of the instrument are designed to make inside measurements.

Next, file each outer edge in a long sweep, rotating and flipping the blank to make them even. Sand the edges and touch up bare metal if necessary. When done, the frame should look as if it has been machined.

**TIP:** Check [www.cooltools.us](http://www.cooltools.us) for videos on how to use digital calipers.

**Photo 10** Place the graph paper side of the blank face down on the bench pin, set the circle template over the bare metal, and use the scribe to etch in lots of circular lines in different diameters. Include the corners. When you're done, touch up the edges with sandpaper. You can now remove the graph paper with hot, soapy water and a toothbrush. Apply hallmarks to the bottom of the smooth side.





11



12

## Design Features

The spinning, two-sided bezel is an entertaining conversation piece friends can share.

### Make the Bezel Wire

**Photo 11** Open the calipers to 5.5 mm and tighten the set screw. Align one jaw along the edge of the 28 gauge fine silver sheet and place the other jaw on the metal. Drag the jaws to scribe a parallel line the entire length. Cut on the line with metal shears. File and sand the edge to remove burrs. Anneal and quench.

**Photo 12** Wrap the bezel wire around the disc. Mark the fit with a Sharpie.

**Photo 13** Using a jeweler's square, draw a 90° line through the mark you made on the bezel wire. Cut with shears. File the ends flush to fit so that the bezel will be snug once it is closed. Flux with Prip's and join the ends flush with hard solder. Quench, pickle, and rinse. Remove excess solder from inside the bezel using a ring file.

**Photo 14** Make sure the bezel seam is aligned with the mark that you scribed across the diameter of the disc, then fit the disc into the closed bezel. (This will help hide the seam later.) To make sure the disc is in the center of the bezel, stack a combination of two coins on a hard surface. In this case, a penny and a dime worked. Place the bezel cup over them and push until the disc is seated on the coin stack and level. Check to make sure both sides of the bezel cup are of equal height.

### Work with a Soldering Jig

**Photo 15** Carve a couple strips off the Solderite block, break them into chunks, and place them under the bezel cup for support. They will keep the disc from sinking during soldering.

**Photo 16** Flux the setting. Add snips of hard solder to join, and heat until it flows. Quench, pickle, and rinse.



13



14



15



16

## AN EASIER WAY

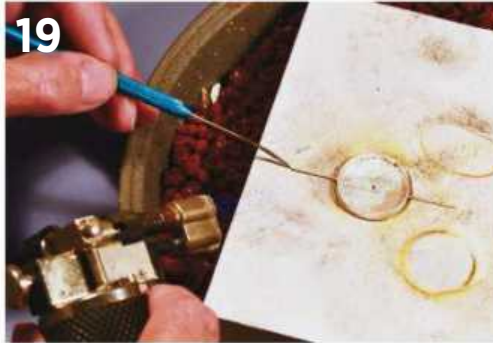


The first time you do this project, make a square frame, with an inner square 28 mm by 28 mm. The double-sided circle bezel should then pivot easily. A circle within a circle can bind if your measurements or soldering are off.



## TIPS

- High-quality, engineering grade graph paper saves a lot of headache. This paper is printed so that squares are in the same position on both sides of the sheet.
- When using graph paper as a guide, move your straight edge slightly to one side of the printed line to make room for the point of a pen, pencil or scribe.
- Use a mechanical pencil to draw precise lines on paper. Sharpies bleed.



**Photo 17** Place the bezel cup on the sheet of sandpaper and rub back and forth to smooth the edges on each side. This is a good time to make bezel heights equal if one side is slightly off. Remove excess solder outside the bezel band using a file. Sand smooth. Check the fit by slipping the watch crystal into the setting. It should drop into position. If it becomes stuck, the setting is too small. Remove by pushing a toothpick through the hole in back.

**Photo 18** Place the bezel cup on the Solderite board as a template and use a scribe to etch a circle around it. Cut away soft material until the bezel cup sinks up to its midline in the board.

### The Spinner and Photo “Gems”

**Photo 19** Straighten 18 gauge sterling silver wire by gripping each end with pliers, pulling and twisting. Cut two 1 inch pins and file the ends flush. Solder a tiny snip of medium solder to one tip of each pin. Place the bezel cup in the hole, making sure the bezel seam is facing left. Position the first pin at the seam and the second on the opposite side, using the scribed mark as a guide. Press into the soft Solderite board to keep from rolling. If you need to raise or lower the bezel cup so that the pins align with the disc, add or remove Solderite scraps. Flux, solder, quench, pickle, and rinse. Check the joins and reheat if needed.

**TIP:** Heat the setting all over, then

concentrate the flame on the inside of the bezel cup near the pin. Keep the solder pick handy to nudge pins against the bezel.

**Photo 20** Make sure the crystals and photos are free of fingerprints and dust. Apply a small amount of E6000 to the flat back of the glass. Wait two minutes, center the crystal over the face in your photograph, and press to eliminate air bubbles. Place a strip of masking tape over the bottom half of the lens, checking its position, then over the top half of the glass to prevent shifting. Weight with a bench block. Repeat. Dry 24 hours to prevent delamination. Trim away the paper and any excess glue with an X-Acto knife, creating two photo cabochons.

### Final Soldering Steps

**Photo 21** Using your saw and tube vise, cut two 1 inch lengths of tubing and one 2 inch piece. File the ends flush. Brush on solder stop at the base of each pin

## see more work

Their Turn  
PAGE 8

## #1 Design Challenge

This setting must be waterproof so that photographs are protected from moisture during tumbling and polishing.

where it joins the bezel. Ignite with a torch to burn off the alcohol.

**Photo 22** Heat and flux the frame and tubes separately to prevent any solder stop from bleeding onto the project. Slip the tubes over the pins and position the setting on the soldering jig. Allow some space between the side tubes and the bezel. Line a small snip of medium solder along the bottom edge of each tube. Place the 2 inch tube at top of setting, secured loosely with T pins. Align snips of medium solder along the top edge of the tube. Keep your solder pick handy in case parts shift during heating. Heat all over, then concentrate your flame on the areas to be joined until the solder flows. Quench, pickle, and rinse and check the joins. Reheat if needed.

**Photo 23** Do not rotate the spinner yet. Instead, saw off the excess tubing. Clean the setting with hot, soapy water and apply a drop of penetrating oil down each pin to free up the spin mechanism. It will not turn until the bezels have been burnished into place.

**Photo 24** Use your flexible shaft and Moore's fine grit sanding disks to remove any excess solder, taking care not to damage the tubing.

**Photo 25** For final waterproofing, apply a small amount of E6000 to the inside of the bezel wire. Spread along the wire with a toothpick. On your bench pin, place the setting upside down and backwards, with the long tube on the back

of the piece oriented to the south. More of the bezel is exposed from this side. Insert the photo cabochon heads up into the cup, and mentally check to make sure it will be face up once it is rotated to the other side. Use a burnisher and steady pressure to bend the bezel over the glass, keeping force away from the spinning mechanism. Since the adhesive makes everything slippery, check often to make sure the photo "gem" does not rotate or move. When you're done, cover the crystal with masking tape and repeat on other side, making sure the back of the head is oriented so that it will be heads up when flipped.

### Clean Up

Allow the project to dry for 24 hours, then peel away excess glue. Cover the watch crystals with masking tape. Smooth the edges of the bezel with a sanding stick. Sand the setting with 1000-grit paper. Harden in a shot-filled tumbler for two hours. Touch up the polish with Tripoli and buff mounted on a flex shaft. String on 8 mm beads and enjoy.

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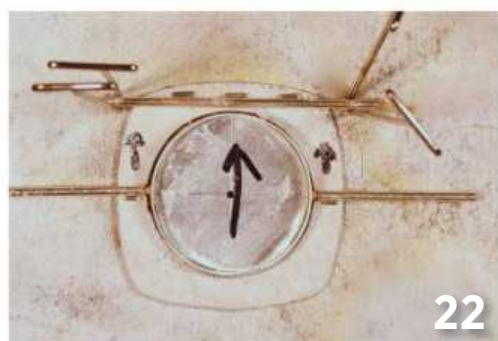
**BETSY LEHNDORFF** is a Michigan silversmith. She has been writing for *Lapidary Journal Jewelry Artist* since 2010. Her work can be seen at [www.HubbardLakeSilversmiths.com](http://www.HubbardLakeSilversmiths.com).

**HANS LEHNDORFF'S** freelance photographs have appeared in *The Rocky Mountain News*, *Boulder Daily Camera*, *Second Story Garage*, *Aurora Sentinel*, and *Lapidary Journal Jewelry Artist*. He is a college football player and economics major.



## #1 Construction Challenge

Measuring and soldering need to be exact. One answer is a project-specific soldering jig.



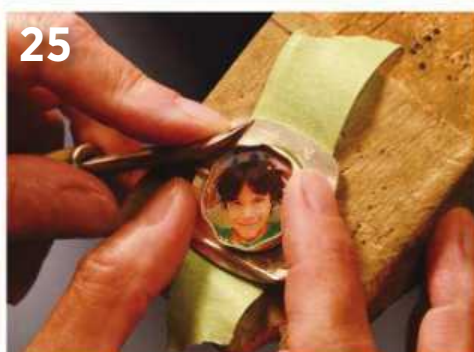
22



23



24



25



So versatile, it's worth  
the challenges

BY SHARON ELAINE THOMPSON

# Artisan Jewelers who love

**Nikki Couppee**  
Hologem Necklace  
Plexiglas, brass,  
vinyl, laminate  
PHOTO: COURTESY  
NIKKI COUPPEE

# PLASTIC

**Arthur Hash**  
Rings  
ABS Plastic  
PHOTO: COURTESY AR-  
THUR HASH



We live in a world of plastic: tags, signs, light fixtures, toys, packaging. There are plastics in our cars, computers, furniture, appliances, costume jewelry, dishes, drinking glasses and cups, food containers, CD and DVD players — not to mention the disks themselves. And you can't even say "fast food" without thinking "plastic."

There are as many types of plastic as there are uses for it: hard plastics, soft plastics, shiny, matte, flexible, rigid, transparent, and opaque plastics. It comes in sheets, rods, wires, threads, blocks. Plastic is lightweight and inexpensive, can be colored, molded, extruded, and 3D-printed into anything imaginable. It's no wonder our culture is enamored of plastic. And no wonder creative jewelry artists find its possibilities irresistible. The wonder is that they can figure out where to start.

## 3D Printing

Arthur Hash, assistant professor and area coordinator for the Metalsmithing & Jewelry Design program at Appalachian State University in Boone, North Carolina, starts at the cutting edge: with 3D printing.

Hash's hectic university teaching lands him in front of a computer more often than at his bench, he says, "so it's convenient to simply create work using the computer." However, working digitally and printing directly in plastic also allows Hash to design objects that would be too large or heavy if made in metal. "I want my pieces to be worn," he says. "I use any tool I can to make that happen." Today, his tool is often a 3D printer.

Hash has worked with a variety of printers including the MakerBot, long the 3D printer of hobbyists because of its low cost and "hackability." Newly partnered with Stratasys, which produces the well-known jewelry CAM system Solidscape, the MakerBot's print resolution has improved dramatically. "The resolution is pretty remarkable compared to a few years ago," says Hash. Personally, he is not dismayed by the remaining, visible resolution lines which, he says, can be removed with traditional jewelry-making tools. "Combining the handmade with the digital is important," he says. "Processing the print afterward allows the artist to retain ownership and originality."



And MakerBot prints in PLA, or polylactic acid, a plastic substitute made from fermented plant starch, usually corn. Besides being a renewable material, unlike other plastic models, which require molding and wax injection before the designs can be cast, PLA can go directly from printer, to kiln, to cast.

Hash is also intrigued by the collaborative potential of 3D printing and the ability to print at a distance. "I've curated an exhibition where all of the work was 3D printed on site. Artists from all over the world sent files that were printed on site. We exhibited the objects. To have that ability is amazing. It means accessibility to your work is endless."

**ABOVE**  
**Arthur Hash**  
Cuff

ABS Plastic

PHOTO: COURTESY ARTHUR HASH

**BELOW**  
**Arthur Hash**  
Lobster Claw Neckpiece

ABS Plastic

PHOTO: COURTESY ARTHUR HASH





## PLAYING IT SAFE

Probably the biggest challenge of working with plastics is safety. Whatever plastic you use, even corn-based PLA, must be considered dangerous. Many are flammable. Most give off toxic fumes when heated, which includes sanding and filing. “It’s important to wear a respirator,” says Donald, “but it’s even more important to have a fan to carry the toxins out of the work environment, because eventually you’ll take off the respirator.”

The dust is dangerous to breathe. “I always wear my mask, whether sawing or polishing,” says Couppee. She works wet to mitigate some of the dust, tries to do a bunch of cutting at one time, followed by a wet cleanup to get rid of the dust. “I am very careful with my studio clothes. I don’t wear the same jacket or hoodie twice.” When she’s done with her studio work for the day, she says, “I roll them up immediately and take them to the washer.”

“Plastics are chemicals,” says Stanionis. “You can develop skin reactions and become intolerant.” While the fumes from mixing urethane resins are not quite as dangerous as other resins, she says, she still works in a well-ventilated space, and wears protective gloves, and glasses, and uses a respirator.

Educate yourself on the properties of the material you are using. Wherever possible (it won’t be if you’re working with found plastics), get a Material Data and Safety Sheet for the specific material you’re using. The manufacturer should be able to supply one.

Consider how you’ll dispose of the waste. Your area may require hazmat disposal.

If you want to work with a particularly difficult or dangerous plastic, consider farming it out to a company that is set up to handle the risks.



**ABOVE**

**Lin Stanionis**

Rapture Brooch  
Urethane resin, 18K gold findings

PHOTO: JON BLUMB

**BELOW**

**Lin Stanionis**

Confessional Neckpiece  
Urethane Resin

PHOTO: JON BLUMB

## Castable Urethane Resin

Lin Stanionis, professor in the Visual Art Department at Kansas University in Lawrence, Kansas, became interested in plastics in grad school in the 1980s. At that time, she felt the acrylic sheet being used was of limited potential, and the acrylic liquids were “more difficult process-wise.” So it wasn’t until the development of liquid urethanes and silicone rubbers for individual use that she became fascinated.

“Urethane is easy to use, easy to mix and cast. You can make urethane look like almost anything depending on the colors or the additives. It can appear to be honey, alabaster, or caviar. It’s a 21<sup>st</sup> century material.”

While color effects are limitless, Stanionis, whose work investigates the human place in the cycle of life and death, usually colors her resin black. “Black, while carrying historical connotations, is also a truly modern color,” she notes. Her work references many forms of historical jewelry including faith ornaments that “connect people to their faith and their God,” she says. The combination of color, material, and the use of formal arrangements, such as the “circle squared” — which she describes as “a relationship between graphic elements that has had spiritual connotation from very early times” — make Stanionis’s pieces simultaneously modern and reminiscent of the jet mourning jewelry of the Victorians.

The cycle of growth, decay, and death is particularly visible on the Kansas prairie. Stanionis collects evidence of the life cycle — seeds, insects, bones, rattlesnake rattles, bits of wood — and molds them or models them in wax or paper, then casts them (in metal or resin). She often manipulates and reworks the initial cast piece, then makes an-



## MORE ON RESIN

If you want to learn more about using resin for your jewelry designs, check out Jennie Milner's video series on resin jewelry:

- Resin Flower Pendant
- Colorful Resin Earrings
- Resin Ring Bling
- Bezeled Resin and Silver Bracelet

Available now at  
[www.interweavestore.com](http://www.interweavestore.com).



## Altering Found Plastics

Mary Donald, a jewelry artist in Los Angeles, uses found plastics, and they come from a variety of places: thrift stores, garage sales, and businesses that use plastics in their work. Small scraps may not be useful to a builder, say, “but a jeweler can do a lot with a small piece.”

She likes the fact that she is keeping these bits and pieces out of the landfill, but her primary interest is in the qualities of the plastics: their transparency, translucency, light weight, and low cost.

Donald uses jewelry working skills — sawing, filing, sanding — to work her plastics; she also uses woodworking skills, such as carving. “She rarely uses her plastics “as-is.” Part of her graduate studies with Arline Fisch at San Diego State was a technical investigation on coloring plastics. While she says she didn’t use the information at the time, she applies her discoveries to her work today by dyeing, painting, and using colored pencils to alter the color of plastics.

For plastics, heat is a great transformative process and Donald heats, reshapes, and burns plastics to give them their unique appearance. Plunging hot plastics into water after heating them, she says, usually locks in the new shape.

Flexible plastics can be bent, but that doesn’t mean they’ll keep that shape, says Donald. She uses many methods of cold-connecting her materials to hold them in place: rivets, grommets, sewing, stapling, tying, jump rings.

“Experimentation is a huge part of my creative process,” says Donald. “Plastics lend themselves to that because you can get them to do so many things.”

To see more of Mary Donald’s work, go to [www.marydonaldstudio.com](http://www.marydonaldstudio.com).

**LEFT**  
**Lin Stanionis**  
Rose Pool Brooch  
Urethane resin, 18K gold findings  
PHOTO: JON BLUMB



other, final master mold which she uses to make the elements she uses in her work.

Each element requires a different mold and parts are cast individually. She then assembles the resin parts, usually pegging them together with wire first and then uses the same urethane resin in the joints as a glue to permanently adhere the parts. The process of making her work with numerous resin parts “allows for a more complicated 3-dimensional object, one that is as interesting on the back as it is on the front. If I were to build the entire piece as one unit and then mold it, it would be difficult if not impossible [to remove from the mold] because of the undercuts. I wouldn’t get the fully dimensional forms and spaces underneath elements that are possible by building with individual parts.”

To see more of Lin Stanionis’s work, go to [www.art.ku.edu](http://www.art.ku.edu), and look for the faculty gallery.

“I’ve curated an exhibition where all of the work was 3D printed on site. Artists from all over the world sent the files. We exhibited the objects. To have that ability is amazing. It means accessibility to your work is endless.”





**Nikki Couppee**  
"Fire Opal" Neogem  
Necklace  
Plexiglas, brass, laminate  
PHOTO: COURTESY NIKKI  
COUPPEE

**Nikki Couppee**  
Shell Valentine Earrings  
Plexiglas, brass, sterling silver,  
fine silver, found object, resin  
PHOTO: COURTESY NIKKI COUPPEE

## Gems from Plexiglas

When San Francisco jewelry artist Nikki Couppee moved to California to do a residency, she had planned to continue working with cut steel to imitate diamonds, a technique dating back to the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. However, the right equipment was not available. Couppee had worked with clear Plexiglas to imitate crystals. So it was a natural shift to move to this material which also allowed her to add more color to her work than did the muted steel palette.

Plastics suit Couppee's work which pokes fun at the idea of abundance and value. "I seek to create opulent jewelry reminiscent of royal jewelry but made out of Plexiglas and quotidian materials as stand-ins for precious metals and gems." In addition, the use of lightweight plastic allows her to make oversize pieces.

Couppee uses flat Plexiglas, 1/4" to 2" thick, which she cuts and shapes with a hand saw and belt sander, then wet sands to keep dust down. She finishes it with a polishing compound specifically for plastics. Referencing paste jewelry, Couppee may use mirrored Plexiglas.

Plexiglas gives Couppee a range of transparent colors, but she also makes her own opaque colors by mixing a two-part acrylic resin that comes with pigments in primary colors so she can mix any color she wants. She also uses found plastics. "I take apart a lot of junk jew-

elry," she says, and includes the rhinestones from old costume bracelets and large faux pearls in her work. "Whatever I get, I manipulate it to fit what I'm doing," she says. She also picks up stray plastics, if the color and dimensions are right. One of her favorite pieces of plastic, she says, she found on a beach in Brazil. "It means just as much to me as a regular stone," she says.

Plexiglas and other plastics are particularly useful in making large earrings. "I like big earrings, but I'm sensitive to their weight." With plastic, she says, "I can make big statement earrings, but they're not too heavy." Couppee's earrings are never identical. Though earrings are recognizable as a set, pieces of the same color may be different shapes, there may be different accent pieces, or a different number of drops, which makes them endlessly fascinating. "I really like earrings to have a conversation between the two. It's more interesting when I'm making them," she says.

## The Plastic Challenge

Plastics are not all alike and they're not all indestructible. If you work with them, you'll have to consider their individual qualities say the artists we spoke with, who point out the following:

Powdered nylon tends to get dirty, especially if 3D-printed in white, the default printing

see  
more  
work

Their Turn

PAGE 8

color. Print in a dark color, or protect it with a sealer, clear-coat it, or impregnate it with resin to give it a barrier that will prevent staining.

Sunlight can discolor or embrittle many plastics. Epoxy resins will yellow over time, while urethane resins are UV resistant under normal use, although long and constant exposure to the sun will probably have an effect.

UV sensitive resins continue to cure in sunlight, shrinking or deforming. While they hold a lot of detail, and are great for making a prototype for a mold, they're probably not the best choice for a finished piece of jewelry that you intend to last.

ABS — the plastic used for Legos — is tough and “virtually indestructible,” a good choice for jewelry that will get rugged wear. But it has a low melting point, and it requires heated acetone to smooth the surface, a dangerous procedure that requires the right safety equipment.

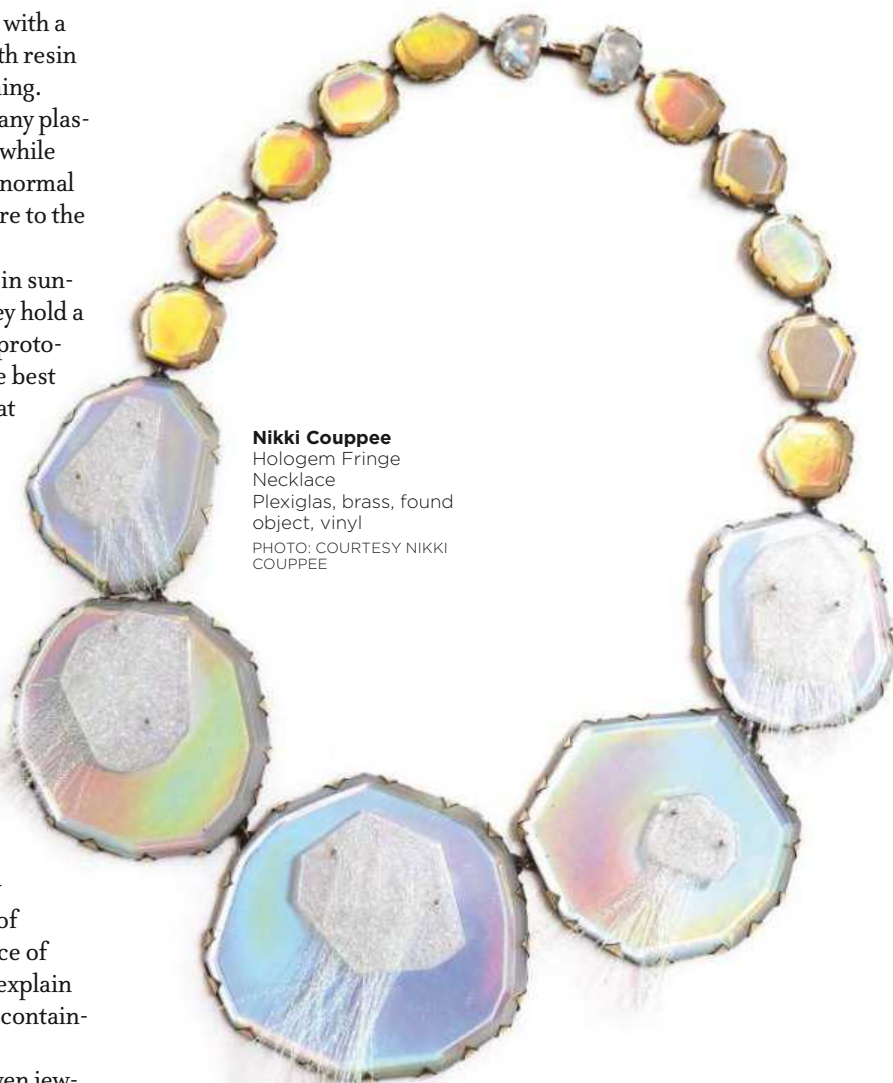
And then there is public perception and pricing.

The connotation of “plastic” in our culture is “cheap.” While customers of all ages respond positively to the color, boldness, and light weight of plastics, they can get stopped by the price of artist-made work. It may be difficult to explain to customers why a piece made from or containing plastic is priced the way it is.

Because pieces are one-of-a-kind, even jewelry with plastic elements can take a great deal of time and care to produce. “People have to look at the work as one-of-a-kind. They have to think in terms of the value of the work — what it is and what it means — rather than the value of the material,” says Stanionis.



**Nikki Couppee**  
Fancy Cocktail Earring  
Plexiglas, brass, sterling silver, fine silver  
PHOTO: COURTESY NIKKI COUPPEE



**Nikki Couppee**  
Hologem Fringe  
Necklace  
Plexiglas, brass, found  
object, vinyl  
PHOTO: COURTESY NIKKI  
COUPPEE

“You work just as hard at designing something whether it’s in plastic or metal,” says Hash.

“My pieces are very time consuming to make,” says Donald, making labor a big part of the price. Labor includes not only the making time, she explains, but the time it takes to organize all the bits and pieces of found objects, the time to suit up and clean up in order to handle the material safely.

Education is critical. Donald, who also presents her work at art and craft shows, spends a lot of time educating her customers. Whether or not she is selling, she says, she is “extremely busy talking to people, telling them about the work. They’re intrigued by so much of the material which is upscaled from scrap.”

**SHARON ELAINE THOMPSON** is a freelance writer based in Oregon. She has written for *Lapidary Journal Jewelry Artist* since 1987. You can learn more about her and read previous articles at [www.jewelryartdiva.com](http://www.jewelryartdiva.com).

## FIND THEM

**ARTHUR HASH:**  
[www.arthurhash.com](http://www.arthurhash.com)

**LIN STANIONIS:**  
[www.art.ku.edu](http://www.art.ku.edu) (look for the faculty gallery)

**MARY DONALD:**  
[www.marydonaldstudio.com](http://www.marydonaldstudio.com)

**NIKKI COUPPEE:**  
[www.nikkicoupee.com](http://www.nikkicoupee.com)



# KITCHEN CUPBOARD PATINA

I love working with copper, and now that I've learned to add patinas, they've given my jewelry designs — especially the copper ones — a whole new dimension. Recently, jewelry artist Gayle Bird showed many of us how to apply a lovely, non-toxic verdigris or blue-green patina to metal jewelry using just salt and vinegar!

The great thing about this technique? Almost everything you need to do it is probably already in your kitchen! And it's simple. Just mix vinegar and salt — there are a lot of different “recipes” for this, but I like the “3+3” mixture of 3 tablespoons of vinegar and 3 teaspoons of salt. Mix them in a small, shallow dish so that the mixture is deep enough to cover the piece. Stir the mixture until the salt is “almost” all dissolved.

Make sure that your metal is very clean. I wash the copper with dish soap. Blot it dry with paper towel. Then sprinkle baking soda over both sides of the piece and rub it in with steel wool, rubbing with the grain of the metal. (Be careful to hold your piece by the sides to avoid getting fingerprints on it.) Rinse the baking soda off thoroughly. Blot the piece dry, and then drop it in your salt and vinegar. Let it sit for at least ½ an hour. (You might like to leave it longer. It's your preference. Just experiment!)

Take your piece out of the mixture and set it on two or three pieces of folded paper towel. Don't dry it! You want your metal to air dry at this point. That's where the patina comes from. You will see salt crystals on your wet metal. That's good!



**Karla Rosenbusch**  
Verdigris  
Pendants  
Copper, salt-  
and-vinegar  
patina  
PHOTOS:  
KARLA  
ROSENBUSCH

You want that. In fact, you may want to sprinkle a little more salt on your piece. (Again, experiment.)

Now comes the really hard part — at least it is for me. Leave it alone! Oh, it's tempting to play with it, but the longer you leave your piece alone, the better the patina becomes. You might want to turn it over a couple of times to expose both sides to the air (and just to sneak a peek at what both sides are doing), but you should leave it alone for several hours. Overnight is best, but it depends on how much patina you want on your piece.

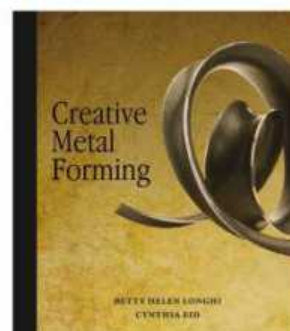
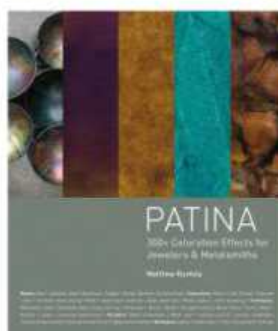
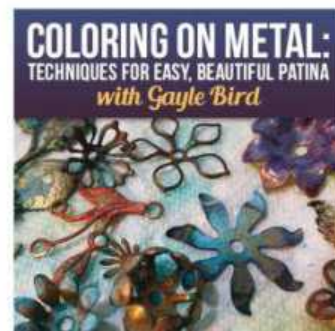
After your piece has a lot of patina on it, you'll need to seal it. I use a spray-

on lacquer (the only ingredient in this technique that I don't keep in my kitchen). Trying to rub on waxes or brush on lacquer (like clear nail polish) will work but may remove too much of the patina. Some of the patina will, in fact, come off with the spray-on lacquer, so you should always let more patina build up than you'll actually want on the finished piece.

And that's all there is to it. Of course, there are a lot of other ways to get verdigris and other patinas on your metal jewelry. For more techniques, check out Gayle Bird's on-demand webinar, "Coloring on Metal: Techniques for Easy, Beautiful Patina;" Matt Runfola's excellent book, *Patina*; and Tim McCreight's video, "Patina Basics." To learn additional metal forming techniques and how you can add patina to enhance your metal jewelry, take a look at Cynthia Eid and Betty Helen Longhi's book, *Creative Metal Forming*. All of these resources are available at [www.interweavestore.com](http://www.interweavestore.com).

– Karla Rosenbusch  
Jewelry Editor

## ADDITIONAL RESOURCES



FIND THESE AT [WWW.INTERWEAVESTORE.COM](http://WWW.INTERWEAVESTORE.COM)

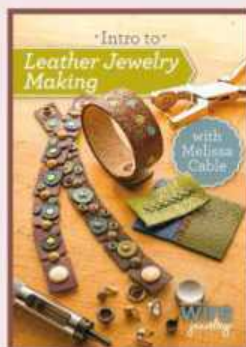


## Love Leather

Take advantage of the colors, pliability, light weight, and soaring popularity of leather in jewelry by learning the basics of working with leather and more. Leatherworking expert, jewelry teacher, and founder of the Create Recklessly line of leather tools and supplies Melissa Cable was recently in our studios shooting two videos on leather jewelry.

In "Intro to Leather Jewelry Making," Cable introduces you to basic leatherworking techniques; how to cut, pierce, saw, and glue leather; and how to set hardware such as eyelets, rivets, and snaps. You'll create a practice bracelet to hone your leatherworking skills.

In "Intermediate Leather Jewelry Making," Cable



teaches more advanced techniques like stone setting, bead inlay, adding fiber, using alternative closures, and more.

Both videos are available at [www.interweavestore.com](http://www.interweavestore.com).



## JEWELRY RESOURCE COLLECTIONS

### ... Jewelry Etching Made Easy

Everything you need to start the art of etching for your jewelry designs. Includes:

- PnP Blue Image Transfer
- Agate Burnisher Knife
- 3M Polishing Paper
- Liver of Sulfur
- *Making Etched Metal Jewelry* by Kristen Robinson and Ruth Rae (book)
- "Jewelry Etching on Copper" with Lexi Erickson (video)
- And more!



### ... Ultimate Copper Jewelry Making Collection

Explore one of today's most popular base metals. Includes:

- 16-gauge copper wire
- "Easy Copper Jewelry Making" with Kim St. Jean (video)

- "Heavy Gauge Wire" with Tracy Stanley (video)
- *Contemporary Copper Jewelry* by Sharilyn Miller (book)
- "Easy Electroforming for Jewelry" with Denise Peck (video)
- And more

### ... 100+ Wire Jewelry Projects

Favorite projects from the pages of *Step By Step Wire Jewelry*.

Includes:

- 10 Wire Earring Projects
- 10 Dazzling Wire Necklace Projects
- 10 Wire Weaving Projects
- 10 Wire and Pearl Jewelry Designs
- 10 Ingenious Wire Findings
- 10 Fun & Easy Wire Rings
- And more!



**All of these resource collections - and many others - are available at [www.interweavestore.com](http://www.interweavestore.com).**

**COMING IN  
JANUARY/  
FEBRUARY**



**Arlene Mornick**  
Hinged Locket  
Silver metal clay,  
sterling silver wire  
PHOTO: JIM LAWSON

- Chrysotile pendant
- Hinged locket
- Agate and silver heart pendant
- Textured silver bangle

### NEWS TO SHARE?

**?** Facets accepts news and images of new products, innovations, industry happenings, and events as space permits. Share your news by sending items to: [KRosenbusch@interweave.com](mailto:KRosenbusch@interweave.com); or Lapidary Journal Jewelry Artist, 88 Glocker Way, #299, Pottstown, PA 19465. Please be sure to indicate "Facets" on the subject line or envelope.

## HANDMADE BUSINESS COURSES

In January 2016, Craft Online University will be offering two courses from Wendy Rosen and the Arts Business Institute. The successful six-week "How to Launch a Successful Handmade Business" will be rerun, supplemented by a second exciting course, "How to Successfully Price a Handmade Business." Both classes will begin January 18. **For more information and to register, visit [www.craftonlineuniversity.com](http://www.craftonlineuniversity.com).**

## Ornament Contest

Enjoy the holidays - and win! Do you make holiday ornaments using jewelry-making techniques and materials? Share your most festive pieces in the 2015 Holiday Ornament Contest on Jewelry Making Daily for your chance to win great prizes! Get all the details and enter on Jewelry Making Daily at [www.jewelrymakingdaily.com/2015ornament-contest](http://www.jewelrymakingdaily.com/2015ornament-contest).





# *Choose the right file for every job!*

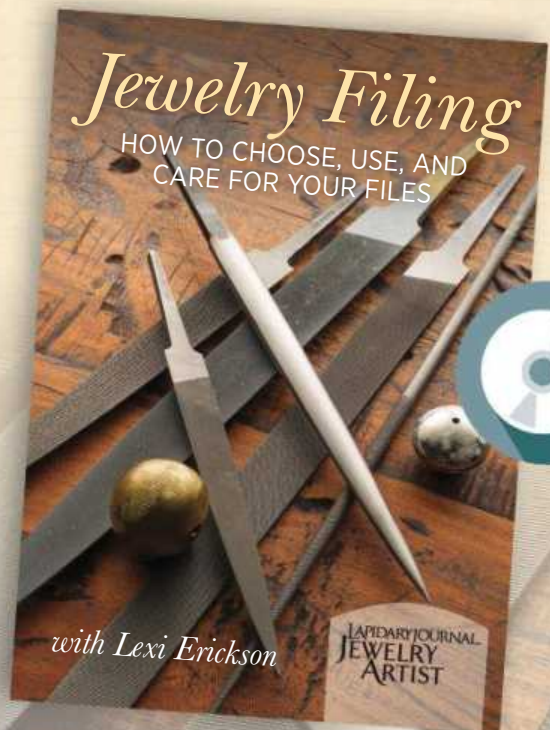
## *Jewelry Filing*

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with Lexi Erickson

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- Identify all of the different file types, sizes, and shapes that are available
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By Tom & Kay Benham,  
contributing editors



PHOTO: JIM LAWSON

## SETTING FOR ROUND SAPPHIRE

**Q** I am new to making jewelry and purchased a 1.11 carat, round cut sapphire to make an engagement ring. I know she really likes antique design rose gold, but I'm not sure what setting to purchase because the bezel or opening is stated in mm. Also, any recommendations for buying these settings?

Flmedic911

**A** In order to purchase the proper setting for your sapphire, you need to know several things: the size of the sapphire, which you can measure with an accurate caliper; the ring size of your intended, which you can measure with a ring gauge; and the design style and color of gold desired. "Antique" and "rose" both cover a lot of territory. You can find many jewelry suppliers listed in *Lapidary Journal Jewelry Artist*, by searching the Internet, or checking out the findings available for order online or in a catalog. You'll also need to acquire basic stone setting tools from the supplier.

In addition, you should also be aware that skill and knowledge are required to properly set the prongs — without breaking them and still ensuring they don't loosen and allow the sapphire to fall out. You might want to find out if there is a lapidary club near you because most members are very friendly and could be a great help to you. If there are no clubs near you, we recommend John Cogswell's book, *Creative Stonesetting*, as an excellent reference on stonesetting. The book will explain the process as well as list the tools you will need for setting the stone.

## Re: DOPPING A STONE, August 2015

In response to Patty Spire's question about dopping stones, Monroe "Mo" Mechling of Steubenville, Ohio shares some his tips for dopping stones and on dop sticks:

I am one of those who seldom uses dops on stones. I find the standard dopping wax sold at rock shops does not work well as it is quite heat sensitive and has a tendency to let stones shift quickly and fly from the dop. Having tried most methods, I've found stick shellac from a jewelers supply works well. It has a higher temperature sensitivity and stronger tenacity. Not just any stick shellac works, though. I use only the dark, medium, amber transparent shellac sticks. The colored opaque sticks will not work well. You may find them in woodworking catalogs such as in Grizzly's 2015 catalog.

In another light, wood dowels don't control hand movement well; neither do nails, aluminum, or steel. The metal ones telegraph heat to the shank from the stone. Years ago I found a hickory rung from an old kitchen chair that I salvaged and adapted to fit my needs and still use on occasion. The shape allows excellent control. If you know a wood turner you might have him/her turn one from maple or other hardwood for you. It is my feeling that long dops are superior.

*Editors Note: The general shape of the chair rung is similar to that of a belaying pin. The larger diameter end makes for a comfortable handgrip while the smaller diameter end easily holds a cabochon.*

Our thanks to Mr. Mechling, a long-time reader of *Lapidary Journal Jewelry Artist*, for sharing his thoughts and experiences on this subject. We appreciate receiving his frequent responses to our column via USPS, especially since handwritten letters are a rarity these days.

It may be beneficial for you to spend a few extra dollars on an inexpensive CZ and a similar silver finding on which to practice (maybe even more than one). This is a fairly minor expense compared to a major loss of a gold finding and an expensive sapphire if it doesn't work out well on the first attempt. Plus your intended will have a second ring for everyday wear. You can't beat a two-fer.

## SILVER FORK BRACELETS

**Q** *I would like to start by making some silver fork bracelets and silver spoon rings. I have been researching and see there are a couple of ways to accomplish this. One way is using a butane blow torch, bracelet mandrel, and a rawhide mallet. Also, do you suggest wood or metal mandrels? There are so many options I feel confused!*

RachUK

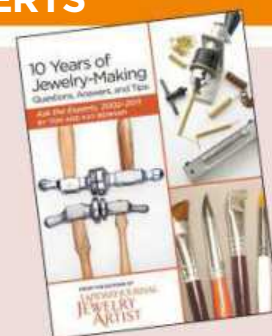
**A** We don't make fork and spoon bracelets, but we do fabricate many from copper and silver sheet, and we generally use a steel bracelet mandrel and a urethane mallet. We do realize that your silverware can be a lot thicker and tougher, though, requiring a lot more force. We fielded a request for a Flatware Bracelet Bender Jig in our column in the last issue that you should find of interest along with photos of the bender jig tool which can be purchased from



## 10 YEARS OF "ASK THE EXPERTS"

Want more advice and tips from Tom and Kay Benham? The first 10 years of "Ask the Experts" has been compiled into one digital volume — "10 Years of Jewelry-Making Questions, Answers, and Tips: Ask the Experts, 2002-2011."

**Available now at [www.bit.ly/10YearsAskTheExperts](http://www.bit.ly/10YearsAskTheExperts).**



Flatwearable Artisan Jewelry Inc., [www.flatwearable.com](http://www.flatwearable.com). We have since discovered that the company has a new tool for bending rings from silverware, something you may also find of interest.

## ITALIAN GOLD JEWELRY

**Q** *I recently purchased a 14K Italian gold bracelet which is very wide but it doesn't weigh too much and is marked "air solid." What does that mean?*

Kmartinez7

**A** According to [www.trademarkia.com](http://www.trademarkia.com), Air Solid appears to be the registered trademark filed by Filk SPA,

a jewelry manufacturer. The classification refers to "precious metals and their alloys and goods in precious metals or coated therewith . . ." Not helpful in determining if your jewelry is plated or not. However, since you indicate the weight feels light, our instincts lean toward gold-plated jewelry. The editor of this magazine, Merle White, has heard of hollow jewelry (gold chain) that is made of karat gold, which could also explain the unexpected light feel.

You could consider speaking to the staff where you made your purchase to see if they can give you more information. At least they might provide contact information if you wish to pursue your inquiry further.

### ASK THE EXPERTS VIA EMAIL OR SOCIAL MEDIA!

**?** Send your questions and tips to: [karla.rosenbusch@fwcommunity.com](mailto:karla.rosenbusch@fwcommunity.com). Or post them to [www.Facebook.com/JewelryMakingDaily](https://www.facebook.com/JewelryMakingDaily) or [www.Twitter.com/JewelMakingDaily](https://www.twitter.com/JewelMakingDaily). Use the hashtag #AskTheExperts.

(Send snail mail to: Lapidary Journal Jewelry Artist, Attn.: Ask the Experts, 88 Glocker Way #299, Pottstown, PA 19465.)

Please include your full name and where you live. Answers may appear in a future issue.



# *Add luxurious color to your jewelry metal in minutes!*

## How to Color Titanium for Jewelry

with Noël Yovovich

*Create colorful titanium through  
heating and anodizing as you:*

- Discover why titanium is the “magic metal” with accomplished jewelry artist Noël Yovovich
- Explore the strength and lightness of titanium as you heat or anodize the metal for instant and brilliant color changes
- Mask, texture, and spot-color to control your results

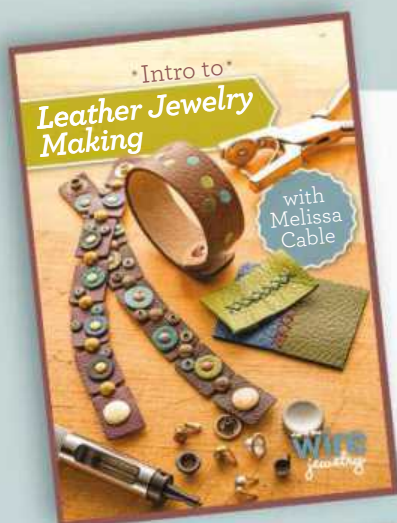
[www.interweavestore.com/  
how-to-color-titanium-for-jewelry](http://www.interweavestore.com/how-to-color-titanium-for-jewelry)





# Learn everything you need to **MAKE LEATHER JEWELRY!**

*Whether you're a complete beginner or just need a refresher, expert Melissa Cable will help you build a solid foundation of leatherworking skills.*



## **INTRO TO LEATHER JEWELRY MAKING**

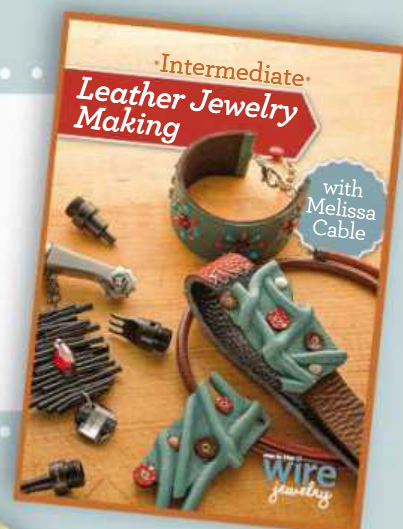
Build a solid foundation of leatherworking skills, from learning to cut, pierce, sew and glue leather to setting hardware such as eyelets, rivets, spots and snaps that you can use to create on-trend leather jewelry. You'll complete a bracelet that uses all of the techniques learned in video, ensuring your skills are practiced to perfection.

[www.interweavestore.com/intro-to-leather-jewelry-making](http://www.interweavestore.com/intro-to-leather-jewelry-making)

## **INTERMEDIATE LEATHER JEWELRY MAKING**

Have some experience with leather but want to go beyond traditional uses? With this video, you'll apply metalworking, fold forming, and bead weaving skills to your leather jewelry making. You'll finish several projects, including bracelets and pendants, with lots of opportunity to customize the projects to your liking!

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### Revere Academy of Jewelry Arts

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# Pauline Warg

## DONE

I completed a 3-year apprenticeship with Philip Morton; designed and created lines of sterling silver holloware for Henry Birks and Sons; wrote *MAKING METAL BEADS* for Lark Books; and filmed "Torch Fired Enamels, A Tutorial," a video for Interweave. I also teach jewelry making, metalsmithing, and enameling nationally, and I was awarded the SCORE Portland "Encore Entrepreneur Success Award" in June 2015.

## DOING

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## HEROES

Morton, Harlan Butt, Judy Stone,

Aaron Macsai, Paul Mergen, and so many more.

## DESIGN SOURCES

I'm inspired by nature and the world around us with textures, patterns, and forms that fascinate me. I also find inspiration in my personal journeys.

## FAVORITE PART OF DOING

Transforming metal with tools and my hands from its original form. Gestalt — the organized whole that is perceived as more than the sum of its parts.

## THE ONE THAT GOT AWAY

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Projects and maps related to the fARTlek Jewelry® line. More at [www.paulinewargdesignsllc.com](http://www.paulinewargdesignsllc.com).

## LATEST VENTURE

*Jeweler's Enameling Workshop* is my new book coming out this month. It's available now at [www.interweavestore.com/jewelers-enameling-workshop](http://www.interweavestore.com/jewelers-enameling-workshop).



**Pauline Warg**  
Enamelled Bowl  
Copper with  
high-fired glass  
enamel (kiln  
fired)  
PHOTO:  
STEVE ROSSMAN

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Photo was taken in the Santa Fe, N.M., studio of award-winning jewelers Robin Waynee and Ryan Roberts.

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